Radio
Database
International

1988 BUYER'S GUIDE
TO WORLD BAND RADIOS

PASSPORT TO WORLD BAND RADIO

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With the Philips D 2999 World Receiver

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Passport to World Band Radio gives you everything you need to explore and enjoy this exceptional realm. The first part, **How to Tune in the World,** looks at just a few of the countries and subjects available on world band radio. Part two, **1988 Buyer's Guide to World Band Radio,** supplies authoritative "hands-on" and laboratory tests of the latest models and comparative ratings of just about every major portable or tabletop receiver. Finally, **Worldscan** runs through all the frequencies of the world band spectrum and shows who's broadcasting what, from where, at what times, and in which languages.

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With **Passport** as your guide, you have everything you need to tune in the world.

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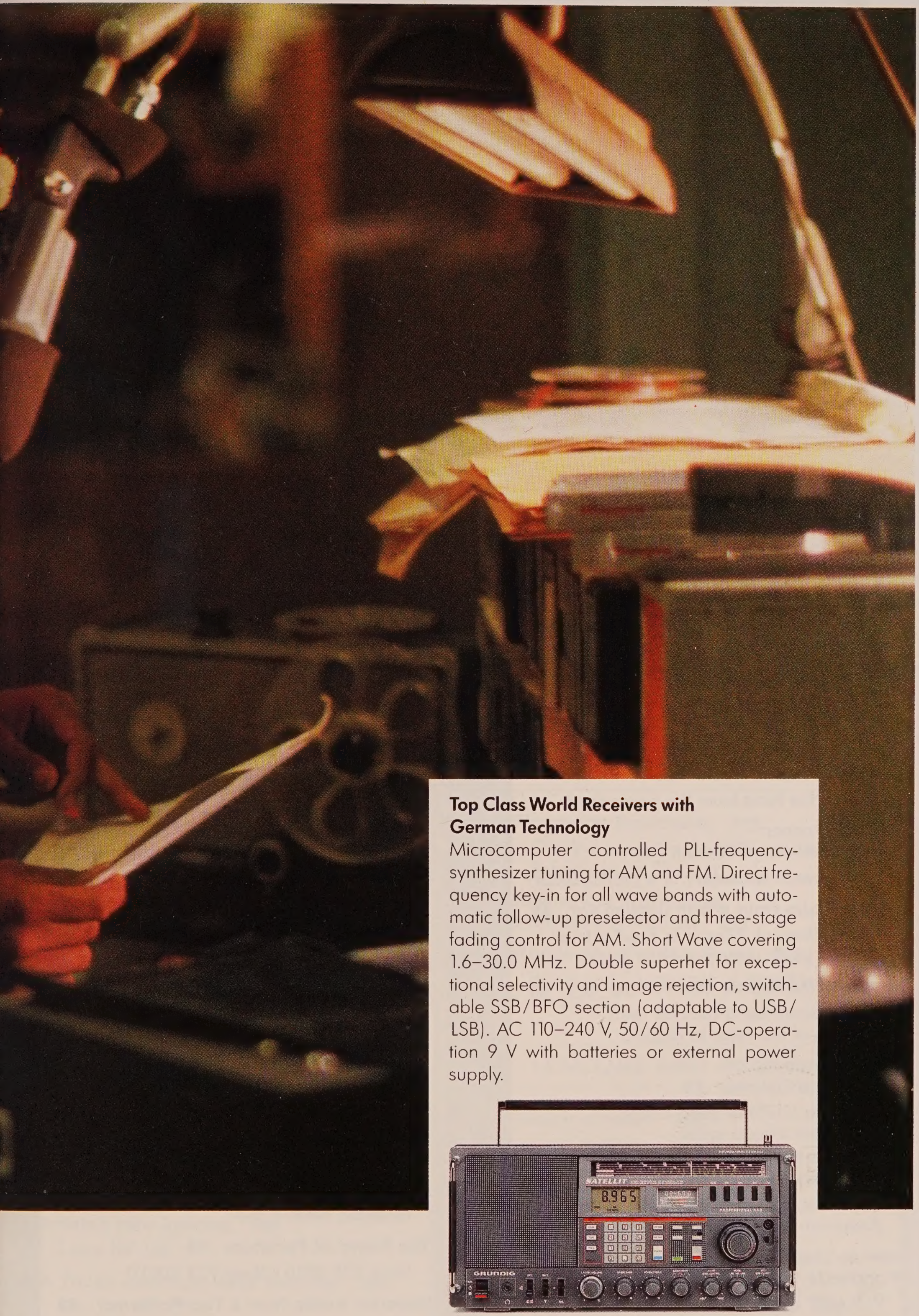

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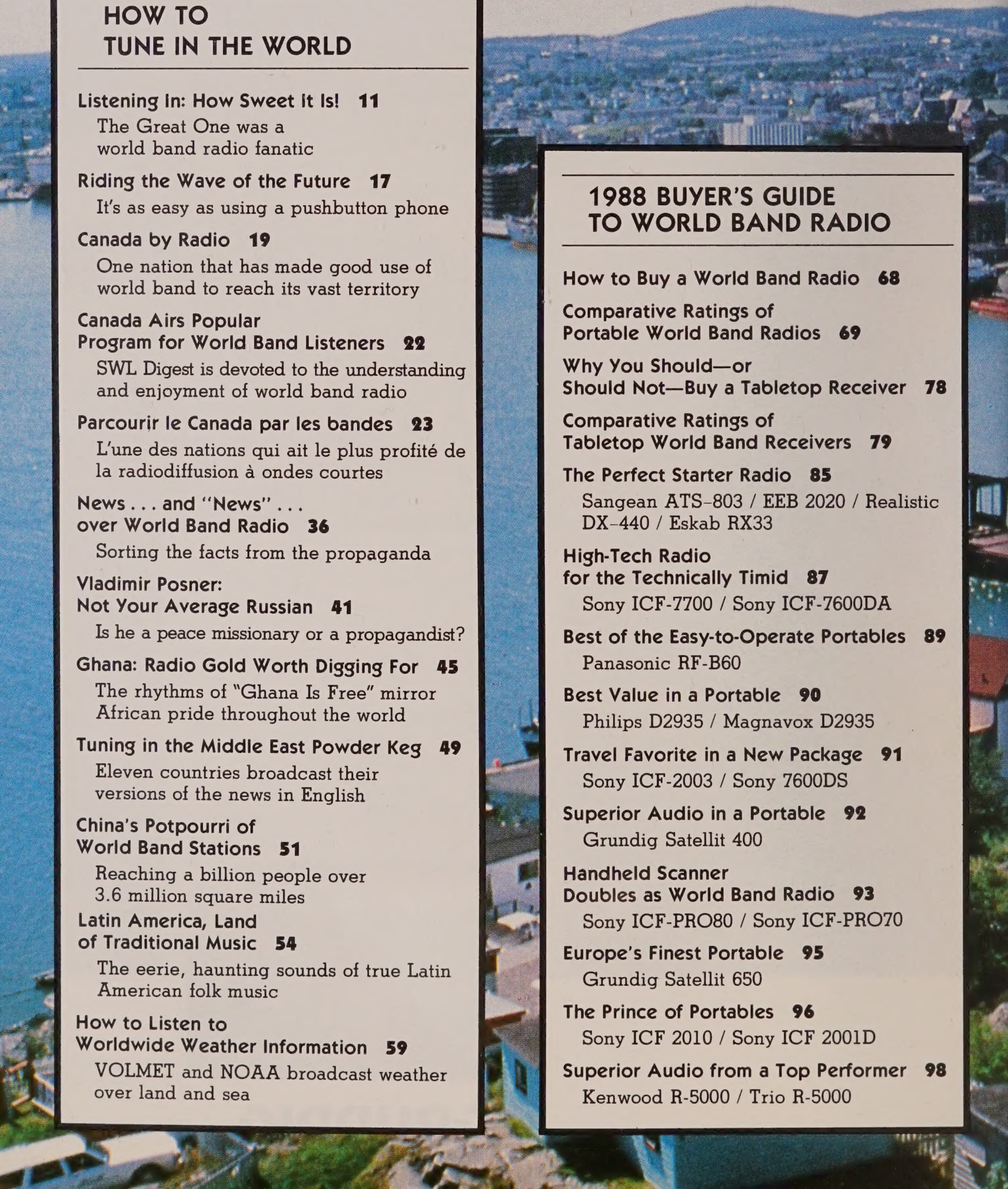


HOW TO TUNE IN THE WORLD

Listening In: How Sweet It Is! 11
The Great One was a world band radio fanatic

Riding the Wave of the Future 17
It's as easy as using a pushbutton phone

Canada by Radio 19
One nation that has made good use of world band to reach its vast territory

Canada Airs Popular Program for World Band Listeners 22
SWL Digest is devoted to the understanding and enjoyment of world band radio

Parcourir le Canada par les bandes 23
L'une des nations qui ait le plus profité de la radiodiffusion à ondes courtes

News . . . and "News" . . . over World Band Radio 36
Sorting the facts from the propaganda

Vladimir Posner: Not Your Average Russian 41
Is he a peace missionary or a propagandist?

Ghana: Radio Gold Worth Digging For 45
The rhythms of "Ghana Is Free" mirror African pride throughout the world

Tuning in the Middle East Powder Keg 49
Eleven countries broadcast their versions of the news in English

China's Potpourri of World Band Stations 51
Reaching a billion people over 3.6 million square miles

Latin America, Land of Traditional Music 54
The eerie, haunting sounds of true Latin American folk music

How to Listen to Worldwide Weather Information 59
VOLMET and NOAA broadcast weather over land and sea

1988 BUYER'S GUIDE TO WORLD BAND RADIO

How to Buy a World Band Radio 68

Comparative Ratings of Portable World Band Radios 69

Why You Should—or Should Not—Buy a Tabletop Receiver 78

Comparative Ratings of Tabletop World Band Receivers 79

The Perfect Starter Radio 85
Sangean ATS-803 / EEB 2020 / Realistic DX-440 / Eskab RX33

High-Tech Radio for the Technically Timid 87
Sony ICF-7700 / Sony ICF-7600DA

Best of the Easy-to-Operate Portables 89
Panasonic RF-B60

Best Value in a Portable 90
Philips D2935 / Magnavox D2935

Travel Favorite in a New Package 91
Sony ICF-2003 / Sony 7600DS

Superior Audio in a Portable 92
Grundig Satellit 400

Handheld Scanner Doubles as World Band Radio 93
Sony ICF-PRO80 / Sony ICF-PRO70

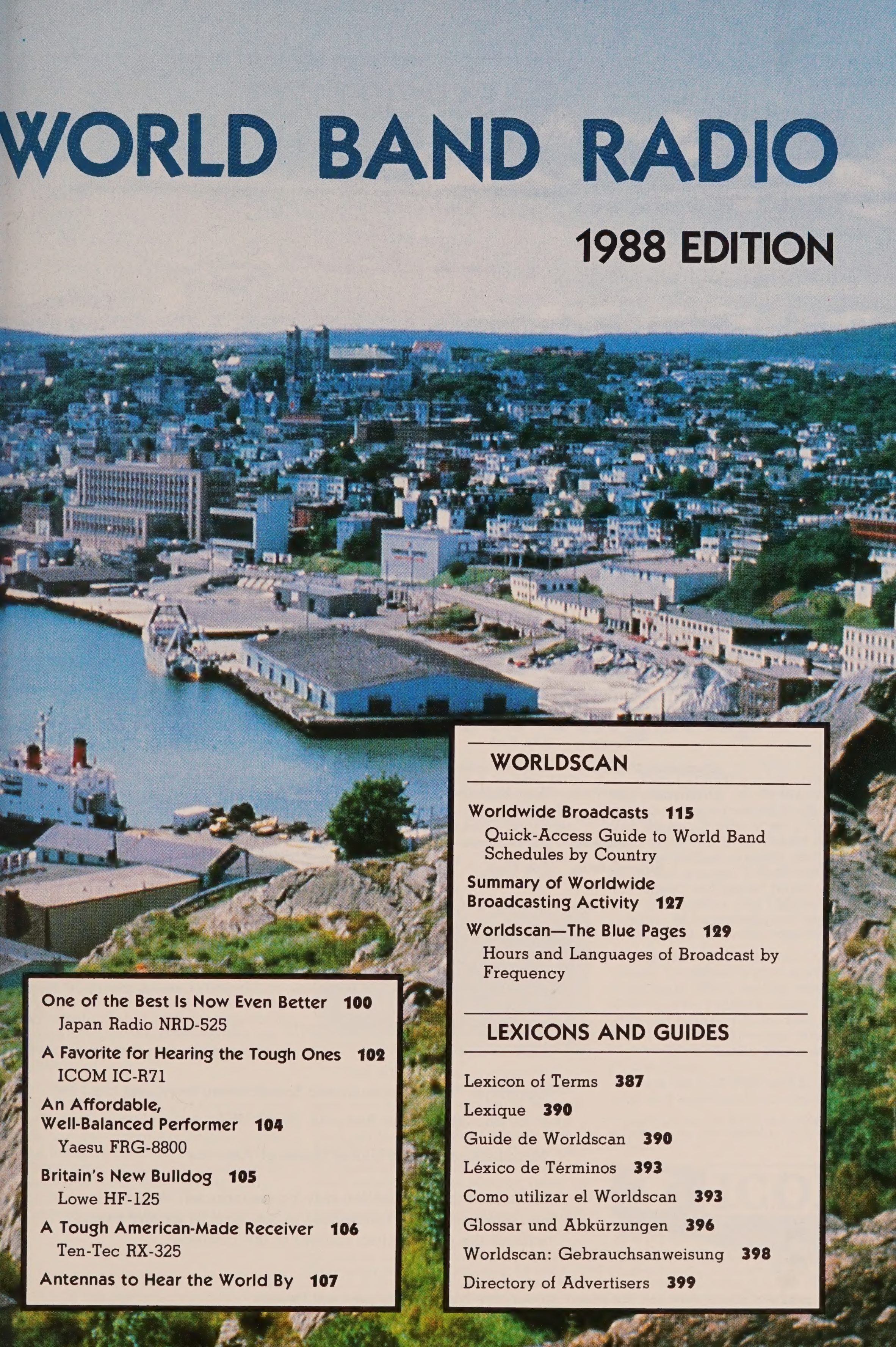
Europe's Finest Portable 95
Grundig Satellit 650

The Prince of Portables 96
Sony ICF 2010 / Sony ICF 2001D

Superior Audio from a Top Performer 98
Kenwood R-5000 / Trio R-5000

WORLD BAND RADIO

1988 EDITION



One of the Best Is Now Even Better 100
Japan Radio NRD-525
A Favorite for Hearing the Tough Ones 102
ICOM IC-R71
An Affordable, Well-Balanced Performer 104
Yaesu FRG-8800
Britain's New Bulldog 105
Lowe HF-125
A Tough American-Made Receiver 106
Ten-Tec RX-325
Antennas to Hear the World By 107

WORLDSCAN

Worldwide Broadcasts 115
Quick-Access Guide to World Band Schedules by Country
Summary of Worldwide Broadcasting Activity 127
Worldscan—The Blue Pages 129
Hours and Languages of Broadcast by Frequency

LEXICONS AND GUIDES

Lexicon of Terms **387**
Lexique **390**
Guide de Worldscan **390**
Léxico de Términos **393**
Como utilizar el Worldscan **393**
Glossar und Abkürzungen **396**
Worldscan: Gebrauchsanweisung **398**
Directory of Advertisers **399**

Radio
Database
International

PASSPORT TO WORLD BAND RADIO

1988

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Library of Congress Cataloging-in-Publication Data

Passport to world band radio.

1. Radio, Short wave—Amateurs' manuals. 2. Radio stations, Short wave—Directories. I. Magne, Lawrence, 1941–

TK9956.P27 1987 384.54'5 87-22739
ISBN 0-914941-15-1

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P.O. Box 300, Penn's Park, PA 18943 USA

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Title page and page 9 show part of Canada's scenic riches: Prince Edward Island and Toronto

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Full Coverage, Maximum Performance. The superb **IC-R71A** is your front row seat to worldwide SSB, CW, RTTY, AM, and FM (optional) communications and foreign broadcasts in the 100kHz to 30MHz range. It features passband, IF Notch, low noise mixer circuits, and 100dB dynamic range. The pacesetting **IC-R7000** receives today's hot areas of interest, including aircraft, marine, public services, amateur, and satellite transmissions in the 25MHz to 2000MHz* range. It includes **all mode operation** low noise circuits plus outstanding sensitivity and selectivity. The combined IC-R71A/IC-R7000 pair creates a full radio window to the world!

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Options. IC-R7000: RC-12 remote control, EX-310 voice synthesizer, CK-70 DC adapter, MB-12 mobile bracket. IC-R71A: RC-11 remote control, EX-310 voice synthesizer, FM module, CK-70 DC adapter, MB-12 mobile bracket, FL-32A 500Hz, FL-63A 250Hz, and FL-44A filters.

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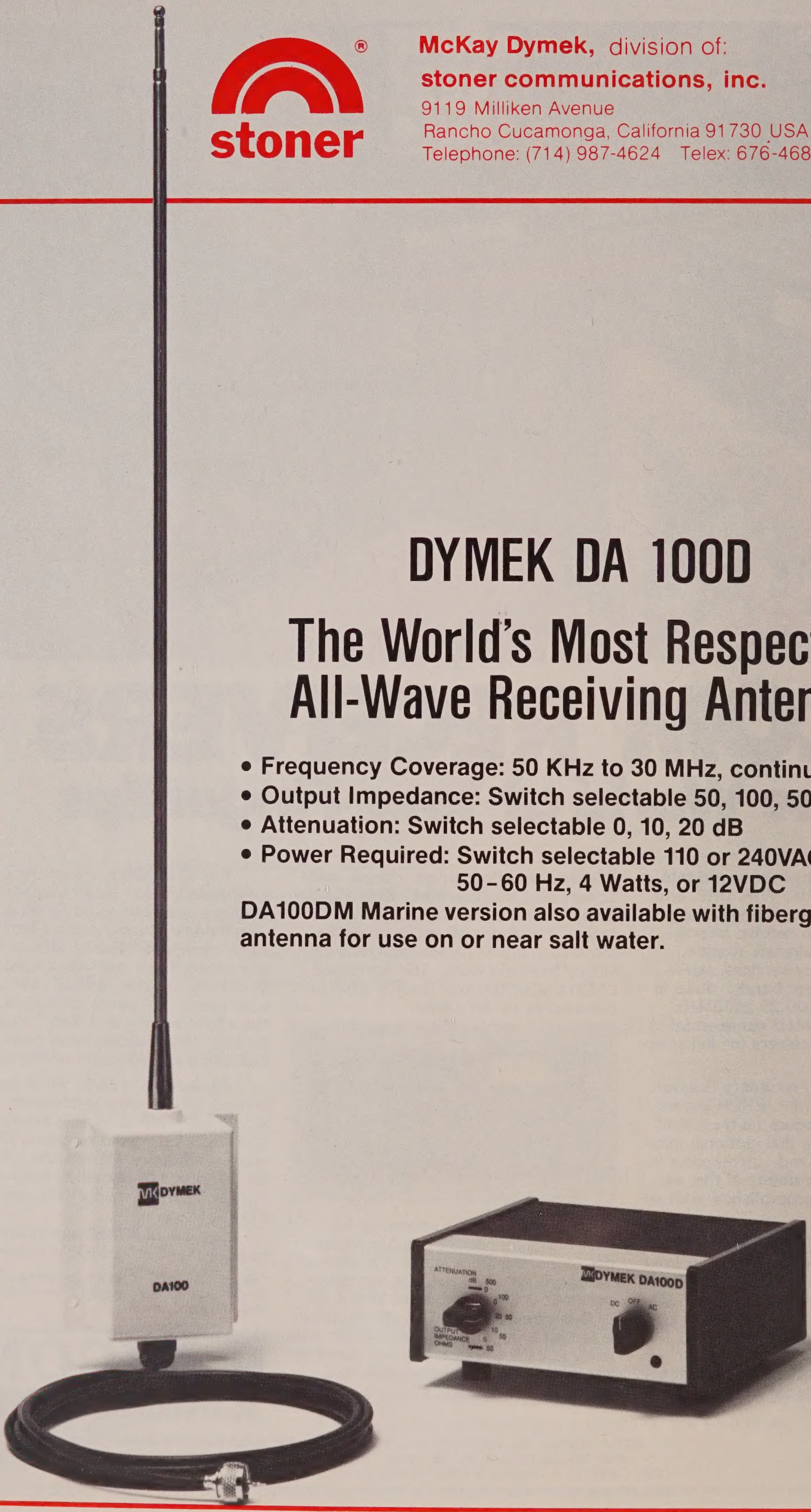
MK DYMEK
DA100
ATTENUATION
dB
500
0
100
20
50
10
50
OUTPUT IMPEDANCE OHMS
0
50
MK DYMEK DA100D
DC
OFF
AC

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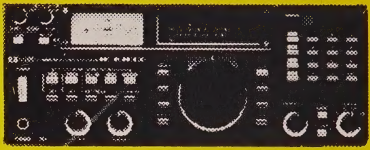

EEB introduces the new ICOM R7000 VHF/UHF receiver, which also is available as the R7000 HP (high performance) with EEB-designed modifications that remarkably improve the sensitivity, audio frequency response, selectivity, and more.

Service Manual, Order: SMR7000

R7000 CALL FOR PRICE

In conformance with their record as a responsible manufacturer, ICOM has done everything possible to hold down production costs while leaving open the potential for post-production modification (e.g., R71A) that can substantially improve performance and give the discriminating operator a more cost effective unit with enhanced specifications.

You have read about EEB's R71A modification in *World Radio TV Handbook*. Now we have done it again with the ICOM R7000 VHF/UHF receiver.

When you are making an investment in this kind of equipment, if only makes sense to maximize your options by selecting the ICOM R7000 and then to go that last yard toward ultimate performance by choosing the R7000 HP from EEB.

ICOM R-7000 Specs

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- Precise frequency entry via keyboard
- 99 programmable memories
- Scan-memory-mode-select memory-frequency
- 5 tuning speeds: 1, 1.0, 5, 10, 12.5, 25 KHz
- Narrow/wide filter selection
- Memory back-up • Noise blanker
- "S" meter or center meter for FM
- AM & FM wide, FM narrow, SSB, CW

EEB HP OPTIONS

1. Front end upgrade improves sensitivity.
2. Audio mod for better volume, less distortion.
3. Spike protection on AC line.
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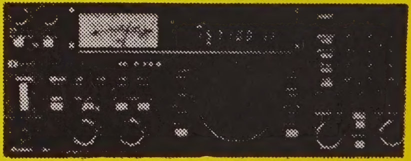
6. Multiplex output mod for SCA and Subcarrier Analysis. Price: $50.00

EEB'S FAMOUS R71A HP



EEB is ICOM's #1 R71A dealer and there is good reason. We offer more modification to enhance your listening pleasure and take better care of you. This is our 17th year. Buy with confidence.

Service Manual ORDER: SMR71A

R71A CALL FOR PRICE

ICOM R71A Specs

- 100 KMz to 30 MHz • 32 memories
- SSB-CW-AM-RTTY (FM optional)
- Computer control • Scanning
- DC Kit • FM • Filters
- Voice Synthesizer
- Computer interface
- Remote control

EEB HP Options

- 24 hour bench test extended warranty
- 4 filter options
- Front end upgrade
- Audio output mode
- AC time constant
- Spike protection
- Final alignment, checkout

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Listening In: How Sweet It Is!

by Don Jensen

Jackie Gleason. For millions of people around the world, the name conjurs up images of his most popular character, Ralph Kramden. For years, audiences laughed to the antics of the frustrated, beleaguered bus driver, his long-suffering wife Trixie and sewer-cleaner friend Ed Norton. The program was, of course, "The Honeymooners," and through television syndication Jackie Gleason has remained a household name for generations, despite his passing last July at the age of 71.

Offstage, Jackie Gleason the actor lived a life that his character, Ralph, could only dream of. He existed in a constant state of overdrive, hellbent down the fast lane of life. The stories are legend—Johnnie Walker by the fifth, lobster by the platterful, brash, swaggering days and nights of carousing, chorus girls, and champagne. And all true, as Gleason freely admitted.

He was looking for a Neanderthal, one of those old fashioned tube monsters

There was, of course, a very private side to this public persona, one that included a near-lifelong love affair with radio. This was the quiet, introspective—he liked to think of it as scholarly—Gleason. He guarded his solitude, especially in his later years, but never lost his zest for living. As always, he had to be a part of anything that was exciting, and world band radio fitted that need perfectly. It was the window on the world that let the actor look out on life by listening in.

Gleason had installed an elaborate listening post on the second floor of his home some years back. Later, it was reportedly destroyed by fire, but the estangement with radio was never complete. Back in the fall of '85, the actor came back to world band radio.

Mike Spivak of Mike's Electronics in Fort Lauderdale remembers the day "The Great One" bounced into his store.

"Jackie Gleason!" said Spivak. "No pal," replied Gleason, "It's Red Buttons."

Attired in a natty golf hat and accompanied by his wife, Marilyn, Gleason told Spivak he wanted to see some world band radios. "I showed him some, but he shook his head." "Show me a *real* set," he said, holding his hands a couple of feet apart to demonstrate the size of the receiver he had in mind.

"He was looking for a real Neanderthal, one of those old fashioned tube monsters," Spivak said. "Like a Hammarlund?" I asked. "Yeah, that's it," he answered. "I told him that those days were long gone!"

Spivak showed Gleason an ICOM IC-R71 receiver, told him how it worked, and left him alone to play with it. Twenty minutes later, the electronics dealer returned to Gleason's side.

"When can you deliver two of these?" the beaming comic asked. Gleason always bought his receivers in pairs. He always had to have a backup just in case—and it never did—one went out on him. Early in 1986, he added a pair of ICOM IC-R7000 VHF/UHF scanning receivers, along with a set of Sony ICF-2010 portables. In fact, a lot of expensive radio gear found its way into Gleason's fourteen-room Lauderhill, Florida, estate—as the world band and 16-element scanner antennas on the roof at 3425 Willowwood attested.

There, in his 20-by-20 foot library—stacked floor to ceiling with bookshelves—was where Gleason would sit, quietly chain-smoking cigarettes and tuning in the world with his battery of radios. Angie Cannon, the *Miami Herald* reporter who managed a lengthy interview with the celebrity not long before his death, describes his monitoring activities.

Courtesy CBS

The Great One hosts a program in 1979

Don Jensen is a reporter for the Kenosha News *and editor of* Numero Uno. *He is a frequent contributor to radio publications.*

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FREE LIMITED ONE YEAR WARRANTY!

NEWEST HIGH TECH RECEIVER

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MODEL 2020

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INTRODUCTORY PRICED

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($14.95 Value)

FREE RADIO STAND
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Here is the latest in the series of fine receivers from Taiwan (ROC). The last three years have seen big changes from Taiwan. There was the Radio Shack DX 400, the Uniden CR 2021, the Sangean ATS 803 and now the EEB 2020!

- State of the art PLL world band receiver.
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- 5 tuning functions: direct frequency key-in, auto scanning, manual scanning, preset recall and manual rotary tuning.
- 9 programmable memories.
- Radio, clock and alarm turn on automatically, play preset stations at preset time.
- Wide/narrow bandwidth . You select for better listening in today's crowded band.
- RF gain control to prevent overloading when near strong stations and improve SSB reception.
- Signal strength indicator (5 LED).
- Shortwave button allows user to tune only international shortwave bands. No need to guess start and stop frequency.
- AM button allows full coverage of 150 KHz to 30 MHz.
- FM button allows full coverage of 88-108 MHz.
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- Multimode AM-FM-CW-SSB allow full coverage of commercial traffic. Amateur, aircraft, ship at sea, and more.
- 24 hour clock—sleep/alarm selectable switch allows hour & minutes or minutes & seconds.
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- Excellent audio with separate bass and treble controls, stereo balance.
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- Battery powered 3D & 2AA (not included).
- Same size and weight as Sony ICF 2010

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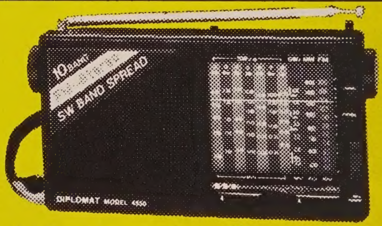

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The perfect radio for the person on the go—The Student or a second shortwave for office or home. Slightly larger than the Sony ICF 4910; otherwise The Diplomat is identical and covers more!

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- FM 88 to 108 with stereo head set out.
- Shortwave 2.3 to 5 MHz continuous 120, 90, 75 and 60 meter bands (not covered by Sony ICF 4910) and 49, 41, 31, 25, 19. 16 and 13 meter band each expanded for easy tuning.
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"Gleason spent hours in his library at his shortwave radio set, just listening to the constant traffic of voices drifting through the air. A news broadcast from Moscow . . . a documentary from Spain. Day after day, he manned those machines, just listening."

Spivak agrees. "He listened to everything. He gave me his private number and asked me to call and let him know if anything interesting was on the air. So I'd do that—give him frequencies I'd heard about from some of the guys down here."

The salesman recalls Gleason as a warm and considerate person, not at all technically inclined. But, like many world band listeners, he was an "intelligent and a very precise man." "He'd call up, saying, 'This is Jackie,' or sometimes, even, 'Hello. This is The Great One!' And he'd have questions, especially about his 'R71's." But Gleason was a quick study and mastered their operation without much trouble. A short time later, he ordered the pair of ICOM IC-R7000 radios.

"They were among the first in this country," Spivak says. "I suggested he send an autographed photo to the guy I knew on the order desk at ICOM America in Bellevue, Washington, as a sweetener to speed up delivery. "He did, too," chuckles the dealer, "although the guy still thinks to this day that I forged the name on that picture."

An accurate time standard is important to anyone who monitors the world radio bands. And so it was to the precise Gleason, who kept a Seiko quartz clock on his desk, next to his receivers.

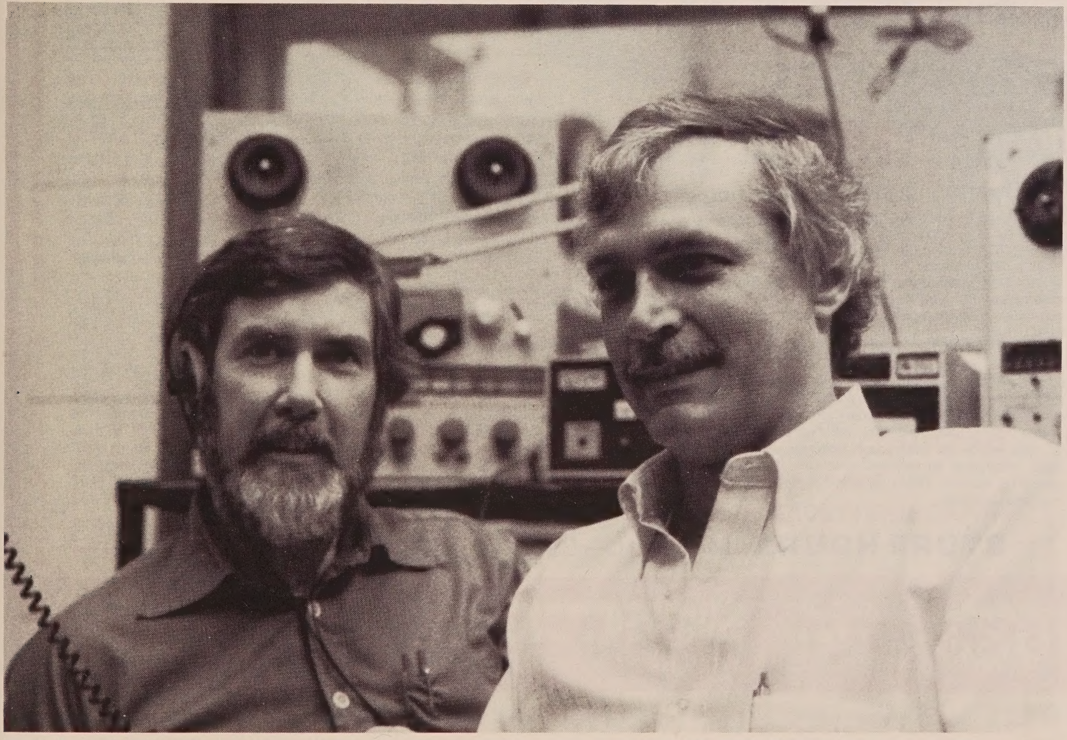
One day he asked Spivak to order him a time piece suitable for traveling. "I got him a Sony cube clock radio with AM and FM." But Gleason had little tolerance for equipment that didn't work the way it was supposed to. Spivak got the call: "Take this thing back, pal. It runs four seconds slow!"

He gave me his private number and asked me to call if anything interesting was on the air

On those occasions when he could be cornered by reporters, he was cordial, but not particularly revealing. The answers to questions about past successes came as if by rote, often ended with the same, tired nonenthusiasm. That is until the conversation shifted to the subject that was, to him, always interesting—his world band radios.

"He brightened just discussing it," said reporter Cannon. His usual low-key voice would rise with enthusiasm, sounding, again, like Ralph Kramden on a roll: "You can pick up the *whole world*!"

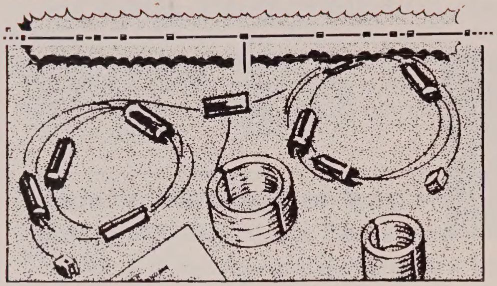
And so you can. How sweet it is!



Ian McFarland (left) and Larry Magne (right) relax after recording a new program in the "SWL Digest" (see story, p. 22)

Rely on SPECTRONICS—A "REAL RADIO STORE"—Since 1967

FAMOUS "EAVESDROPPER" SWL RECEIVING ANTENNA



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- Complete, no assembly needed

All the world's shortwave broadcast bands are yours with the Eavesdropper All-Band antenna! Individually tuned traps make the Eavesdropper work like seven separate antennas, each tuned to a different international broadcast band. Its 100 foot, 72 ohm balanced feedline provides an exact match to the antenna on every band. Completely assembled, and ready to install with 50 ft. of 450 lb. test nylon rope. Overall length: 42′ 10″. Wire: #14 copper. Bandswitching: Automatic, impedance to rcvr: 50-75 ohms balanced.

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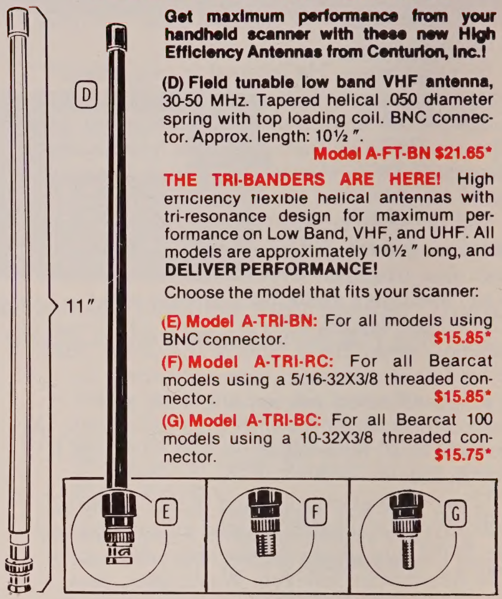

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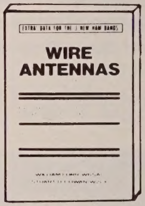

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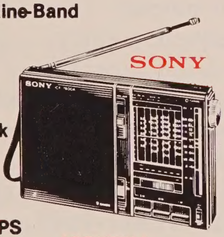

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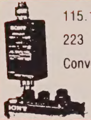

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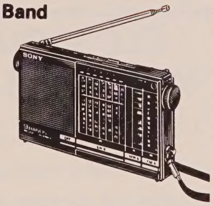

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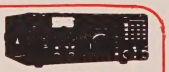

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Marriage of Nature and Advanced Technology

Advanced radio technology makes tuning in stations from around the globe almost as easy as turning on the stereo or dialing a pushbutton telephone. Still, there are some differences between world band radio and its more familiar AM and FM siblings.

Advanced technology makes tuning in stations from around the world almost as easy as dialing a pushbutton phone

The first, and probably most important, is what makes it so fascinating: the enormous distances these signals can travel. While FM and mediumwave AM signals are limited to local coverage, many world band signals actually girdle the planet, traveling huge distances. This is because the signals are dispersed worldwide by a natural, but invisible, layer surrounding the earth called the *ionosphere*. Because no satellites or other artificial intermediaries are needed, world band radio is the only medium by which programs can be beamed direct—without editing or censorship—from one country to another. This, more than anything else, is why world band programs are so interesting and different from anything you hear or see elsewhere. Nature, as much as man, makes it possible.

All that is great news, but it has its price. Because the ionosphere is a natural entity, it has seasons and temperamental moments just as does, say, the weather. Also, like any traveler of great distances, world band signals tend to get a little weary from the journey.

So, reception of world band stations is different from that of local signals. That's why you'll sometimes hear the same station broadcasting identical programming on more than one channel at the same time. So, the reasoning goes, if one channel doesn't make it to your radio, hopefully one or more of the others will. It's something of a shotgun aproach to broadcasting, but for the most part it succeeds in overcoming the day-to-day vagaries of the ionosphere.

Some stations—but not by any means all or even most—find seasonal changes in the ionosphere to be significant enough to prompt them to alter their channel useage from time-to-time. These separate summer and winter schedules are indicated in the "Worldscan" section by a "J" ("June") for summer, "D" ("December") for winter. All other schedules are adhered to year-around, so don't have either a (J) or (D).

Another difference from local stations is that any number of broadcasters—even a dozen or more—may make use of a given channel. Obviously, you can't hear them all at the same time, but you might hear one now, another later. Sometimes you'll not hear what you want because your station's blotted out by more powerful stations, or the ionosphere simply can't carry it to your radio.

How to Listen to Your World

When listening during the local daytime, expect to get the best long-distance reception on the higher frequencies: 11, 13, 15, 17 and 21 MHz. At night, tune around the lower bands having frequencies starting with 5's, 6's, 7's and 9's—plus 3's and 4's during the winter. World band radio is so extensive that there are countless exceptions, but these rules of thumb will get you into the fast lane right away.

You'll find that given regions of the world are

Dominican Republic's Radio Clarin, well-heard on 11700 kHz, airs programs of anti-Castro "La Voz del CID"

more audible during certain times of the year. If you live in North America or Europe, for example, you have a better chance at hearing some of the smaller African and Latin American stations on 4 MHz at night during the winter. Of course, the larger stations tend to be heard year around.

What's Heard Where

In order to be better heard in selected parts of the world, many stations use special antennas that beam most of the signal in a single given direction. *Passport's* "Worldscan" section—the blue pages—indicates where these broadcasts are beamed. But so efficient is the world band medium that you can often hear programs even though they're directed to listeners elsewhere. For example, although Radio France International's English-language program from 1600–1655 World Time (UTC) is targeted to Africa and Europe, listeners in the Americas and most other parts of the world can still hear it . . . especially if an above-average radio is used.

Finally, you'll notice that world band stations operate on a special 24-hour clock called World Time, or UTC. But don't worry about that. It's easy to figure out because so many world band stations announce it over the air. Additionally, there are specialized stations that give you the time. Throughout much of the world, for example, you can hear one or more of the following channels operated by the US National Bureau of Standards: 2500, 5000, 10000 or 15000 kHz. As a bonus, these also provide weather information for the Atlantic and Pacific oceans.

Passport to World Band Radio guides you all the way through the wide world of world band radio. In addition to exhaustive coverage of all schedules, *Passport* includes the "Buyer's Guide" in which you'll find unflinching reviews of the most advanced and popular radios.

Welcome aboard!

Prince Edward Island

Canada by Radio

by Ian McFarland

Canada is one nation that has made good use of world band for reaching its vast territory. Although often unrecognized as such, it is the second largest country in the world, after the Soviet Union. In fact, the entire People's Republic of China could fit neatly within its borders.

But take a look at any map of Canada and you'll see that it looks as if some great hand shook the country, settling the bulk of the population along the eastern part of the border with the United States. That leaves a few hardy souls occupying the remaining expanse of the country. It's clearly not worth it to dot the chilly expanses above the tree line with AM stations. The alternative: world band radio.

In Canada, there are several local commercial stations, all on the mediumwave AM band, that air their programs—mainly for backwoods inhabitants and fishermen—over world band channels. Because these stations are dotted across the country, world band listeners can get a clear view of what's happening in most of Canada's larger cities. Fully half the nation's ten provinces are represented on world band radio in this way.

Wide Variety of Stations Fill the Airwaves

From Quebec, listeners can tune in news and talk shows on Montreal's CFCX, which rebroadcasts the programs of AM-60, CFCF. Like talk radio in the United States, the Canadian version is limited only by good taste. CFCX's world band channel is 6005 kHz and it's on the air fully 24 hours a day.

Want to know what's going on in Toronto? Tune in CFRX. It's Canada's most powerful commercial world band station and the one most often heard by listeners throughout North America and as far away as South America. It relays the programs of CFRB and is found on 6070 kHz.

From Canada's heartland in the province of Alberta comes CFCN on 6030 kHz. Broadcasting from Calgary, its low power transmitter is no match for the big international broadcasters. To give you an idea of the difficulty in hearing some of these local stations, keep in mind that while the Voice of America and Radio Moscow regularly use transmitters of 500,000 watts, CFCN's world band relay—CFVP—is a mere 100 watts, Its channel, too, contributes to its difficulties. 6030 kHz is regularly used by the powerful US Armed Forces Radio and Television Service, which blots out the station's signals for much of the day. Nonetheless, with some patience and persistence—and waiting until AFRTS signs off the channel—you'll have the opportunity to hear it.

Two other stations represent opposite coasts of Canada. CHNX (see photo) on 6130 kHz carries the programs of CHNS in Halifax, Nova Scotia, along the east coast. It benefits from a recently installed new transmitter, but remains a midget among world band signals with only 500 watts.

The other station is CKFX in Vancouver, broadcasting around-the-clock on 6080 kHz. Located on the Pacific coast just across Queen Charlotte Sound, it uses a scant *ten* watts . . . although they have plans to upgrade to between 15-25 watts in the not-too-distant future. As world band listeners know, even ten teeny watts of world band signal travel quite a distance—much, much farther than on either AM or FM. Indeed, the station reports being heard occasionally even as far as Europe and Australia by radio aficionados who relish being able to hear such a miniscule signal from afar.

Since it began in 1936, the CBC has been a shining beacon of excellence

Two more low-power world band stations—one along the east coast in St. John's, Newfoundland, the other across the continent in Vancouver—relay the programs of the Canadian Broadcasting Corporation (CBC). Because they share the same frequency—6160 kHz—you have to listen carefully be certain which of the two is being heard at your location.

Since it began in 1936, the CBC has been a shining beacon of excellence in radio programming. It provides Canadians—and now, through world band radio, many others, as well—with a constantly varying fare of music, news, drama, and other entertainment. Sadly, Canadians have tended to look upon the CBC with a certain amount of disdain, viewing it mainly as the producer of elitist and minority-interest programming. But their oversight is the world's gain.

High-Powered Services Heard Worldwide

The CBC also uses local world band radio, with considerably more powerful transmitters—100,000 watts—to serve the population of the northern region of Canada's largest province,

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Ian McFarland, who prepared this article in cooperation with Larry Miller, is Announcer-Producer of English Weekend Programming at Radio Canada International.

Toronto city scene

Quebec. Here you'll find news, music and some really exotic information not only in English and French, but also in two native Indian dialects, as well as Inuktitut, the language of the Eskimo— or Inuit, as they prefer to be called. World band channels for this CBC Northern Quebec Service include 6065, 6195, 9625 and 11720 kHz. Some of these are heard throughout the Western Hemisphere plus, to a lesser extent, East Asia, Australia/New Zealand and even Europe.

It's clearly not worth it to dot the chilly expanses with AM stations

The CBC also has an excellent and easily heard external service, Radio Canada International. Its programs are a mixture of features especially produced for world band radio, such as *North Country*, heard at 1200 World Time (UTC). Also, it rebroadcasts some of the finest of CBC's news programming. Notable among these are *The World at Six* and *As it Happens*, heard Monday through Friday at various times in the local later afternoon and early evening. Non-Canadian listeners and Canadians traveling abroad have made RCI one of the most popular world band stations on the airwaves. Indeed, Gallup surveys have showed it to be running neck-and-neck with the BBC for first place among listeners in the US.

Canada's use of world band radio is, in itself, not all that unusual. There are any number of countries—Brazil, India, Pakistan, Bangladesh, and Nigeria, for example—that have local, regional and international world band stations. But Canada is especially interesting in that its local world band broadcasting is primarily in English. This makes it the perfect target for world band listeners who not only want to eavesdrop on this vast and diverse country, but also wish to hone their listening skills.

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Coded radio signals are used by press services, government broadcasts, radio amateurs and others. You can monitor these signals with the AEA PK-232 and your personal computer. This single unit can copy six coded formats.

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Short-wave listening can be an exciting hobby. But voice broadcasts are just part of the information available to those with short-wave receivers. Digital signals carry everything from foreign news broadcasts to satellite photos like the one pictured in this ad. The special SIAM (Signal Identification and Acquistion Mode) of the PK-232 will even identify the type of signal, transmission rate, and special characteristics of the signal being received.

The PK-232 requires some type of data terminal or personal computer for operation. Any computer or terminal with a serial RS-232 port can connect directly to the PK-232. A terminal program, like those used with telephone modems, is then used to set up the computer for communication. AEA also offers two special PK-232 programs, one for the Commodore 64 and one for IBM PC or compatible computers.

The weather fax mode requires an Epson graphics compatible parallel printer. The special PK-232 cable connects to both the computer and printer, making it easy to tune weather fax signals and output them directly to the printer.

In addition to receiving and decoding the six different modes, the PK-232 is also capable of transmitting in all six modes. This makes the PK-232 the perfect unit for both the short-wave listener and licensed radio amateur. Contact your local AEA dealer today for more information, or call AEA. Then you'll be able to listen in on the world of information you're missing now.

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Canada Airs Popular Program for World Band Listeners

Each week Radio Canada International airs "SWL Digest," a program devoted to helping you better understand and enjoy world band radio. Included in this popular program are tests of new world band radios and accessories by *Passport's* resident equipment expert, Lawrence Magne. *Passport* editors Tony Jones and Don Jensen highlight worldwide developments, while other features cover a variety of interesting topics, including new world band schedules.

Hosted by award-winning announcer/producer Ian McFarland, "SWL Digest" is heard in many parts of the world—including the Americas, Europe, the USSR, Africa and Australia/New Zealand—at various times. Although the 0007/0107 broadcast is intended for listeners in North America, 2008/2108 for Europeans, 2137 for Africans and 2307 for residents of the Caribbean, in reality these can be heard simultaneously in many parts of the world. Tune around for the best results and handiest times.

1st Saturday/Sunday of the month	Larry Magne's "Test Report" on new world band radios and accessories, plus news of stations and schedules.
2nd Saturday/Sunday of the month	Official monthly reports from radio umbrella associations, plus news of stations and schedules.
3rd Saturday/Sunday of the month	Either Don Jensen's "Journal" or Tony Jones' "Report from South America."
4th Saturday/Sunday of the month	"Potpourri"—special reports and features to aid in listening to world band radio. Also, news of stations and schedules.

A similar program, "Allô DX" is presented weekly in French by Yvan Paquette, animateur.

World Time (UTC)		
Winter Hiver	Summer Été	Broadcast
	1837	Samedi en français sur 7235 ou 7130, 9555, 11945, 15325 et 17875 kHz
1908	1908	Samedi en français sur 15260, 17820 kHz
1937		Samedi en français sur 5955, 7235 ou 7130, 11945 et 15325 kHz
	2008	Saturday in English on 7235 or 7130, 9555, 11945, 15325, 17820 and 17875 kHz
2108		Saturday in English on 5995, 7235 or 7130, 11945 and 15325 kHz
2137	2137	Saturday in English on 11880 or 11945, 15150 and 17820 kHz
0107	0007	Saturday night in English on 5960 and 9755 kHz
0207	0107	Samedi soir en français sur 5960 et 9755 kHz
2307	2307	Sunday evening in English on 9755 and 11710 kHz (plus 930 kHz AM for the Caribbean)

Parcourir le Canada par les Bandes

par Ian McFarland

Le Canada est l'une des nations qui a le plus profité de la radiodiffusion à ondes courtes pour atteindre les confins de ses vastes territoires. Quoique le fait ne soit pas toujours reconnu, le Canada est le deuxième Etat du monde après l'URSS. En effet, l'on pourrait caser à l'intérieur de ses frontières l'intégralité de la République populaire de Chine.

Mais si l'on regarde la carte du Canada, on dirait qu'une main gigantesque eût éparpillé la majorité de la population le long de la frontière Est des Etats-Unis. Il ne reste donc qu'une minorité d'âmes intrépides qui habitent le reste du pays. A quoi bon, alors, parsemer de stations AM les régions glaciales au nord des zones forestières? L'alternative, c'est l'utilisation des bandes internationales.

Au Canada, en effet, il existe de nombreuses stations locales commerciales émettant sur des fréquences AM, qui rediffusent leurs programmes, surtout à l'intention de bûcherons et de pêcheurs isolés, sur les bandes internationales. Dû au fait que ces stations se trouvent éparpillées à travers le pays, l'auditoire international a la possibilité de s'informer des actualités dès qu'elles se déroulent dans les plus grandes villes canadiennes. La bonne moitié des dix provinces de la nation se fait ainsi entendre sur les bandes internationales.

Une diversite de stations

A Québec les auditeurs peuvent capter des programmes d'informations et de discussions en provenance de CFCX à Montréal, qui réémet les diffusions de AM-60, CFCF. Comme aux Etats-Unis la radio d'opinion canadienne ne connaît aucune censure si ce n'est celle des bienséances usuelles.

OTTAWA QUEEN
EXCURSI

The Rideau Canal, Ottawa

Ian McFarland qui a rédigé cet article en collaboration avec Larry Miller, est présentateur-réalisateur des services de fin de semaine en langue anglaise de Radio Canada International. La version française est d'Isabel Walcutt, Ph.D., Directrice de French Instruction and Consulting *à New York.*

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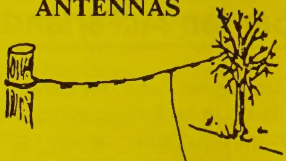

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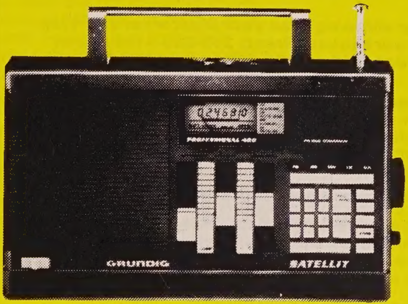

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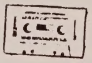

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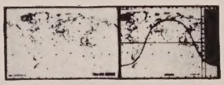

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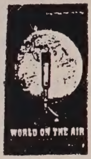

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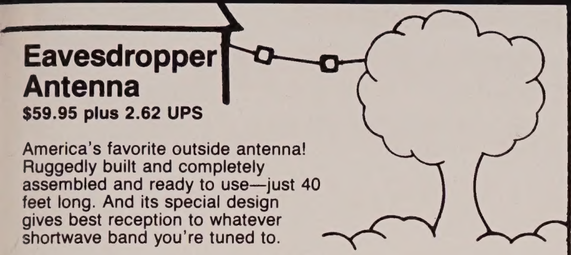

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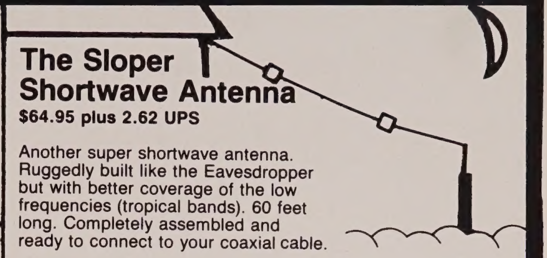

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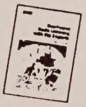

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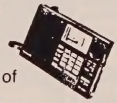

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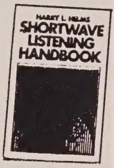

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Et s'il s'agit de se mettre au courant de ce qui se passe à Toronto? On n'a qu'à écouter CFRX. C'est la station commerciale à bandes internationales la plus puissante du Canada et celle qui s'entend le plus souvent par des auditeurs d'un bout à l'autre du continent américain. Elle se charge du relais des programmes de CFRB et émet sur 6070 kHz.

En provenance de l'intérieur de la province d'Alberta s'entend CFCN sur 6030 kHz. Situé à Calgary, son émetteur à faible puissance ne saurait se comparer aux émetteurs des grands diffuseurs internationaux. Pour se faire une idée de la difficulté de capter certaines de ces stations locales, il suffit de songer aux 500,000 watts des émetteurs de la Voix d'Amérique et de Radio Moscou en comparaison avec les quelques 100 watts de CFVP qui transmet vers le monde les programmes de CFCN. D'ailleurs, le canal attribué à cette station ne fait qu'aggraver sa réception car il est utilisé également par la puissante AFRTS (Radio et Télévision des Forces Armées Américaines) sur 6030 kHz, qui recouvre ses signaux pendant une bonne partie de la journée. Avec un peu de patience et beaucoup de ténacité, pourtant, on finit bien par capter ses émissions aux moments où AFRTS quitte le canal.

Les côtes opposées du Canada se représentent par deux stations. CHNX (v. photo) sur 6130 kHz. réémet les programmes de CHNS à Halifax en Nouvelle Ecosse en direction de la côte Est. Munie d'un émetteur neuf, elle reste, en raison de ses signaux qui ne dépassent pas les 500 watts, un nain auprès des géants internationaux.

L'autre station maritime est la CKFX à Vancouver, qui diffuse 24 heures par jour sur 6080 kHz. Située sur le littoral pacifique en face du détroit Reine-Charlotte, elle ne dispose que d'une dizaine de watts. On n'en projette pas moins de les augmenter de 15-25 watts dans le proche avenir. Comme l'apprécient les radiophiles internationaux, même un petit faisceau d'une dizaine de watts d'ondes courtes a une portée remarquable, supérieure à celle des émissions AM ou FM. En effet, la station prétend recevoir de temps à autre, en provenance de l'Europe et de l'Australie, des rapports d'écoute envoyés par des auditeurs enchantés d'avoir capté de si loin des signaux tellement minuscules.

Encore deux stations à faibles émetteurs diffusant sur les bandes internationales, dont l'une à St. Jean, Terre Neuve, et la seconde à l'autre côté du continent, à Vancouver, se chargent du relais des programmes de Radio Canada. Etant donnée leur cohabitation à la même fréquence—6160 kHz—il faut écouter attentivement pour distinguer laquelle des deux on vient de capter.

Depuis sa création en 1936, Radio Canada s'illustre par l'excellence de ses programmes. Conçues pour plaire à l'auditoire canadien et maintenant, grâce aux services extérieurs de Radio Canada International, à des auditoires étrangers également, ses émissions offrent toute une gamme de musique, d'informations, de théâtre, et d'autres divertissements. Malheureusement, les Canadiens eux-mêmes ont tendance à dédaigner quelque peu les programmes de Radio Canada, les considérant comme visant des minorités ou carrément des auditoires d'élite. Mais s'ils y perdent, les étrangers en retirent un gain certain.

Emissions puissantes a portee universelle

Radio Canada se sert aussi de la radio ondes courtes, cette fois-ci à l'aide d'émetteurs puissants de 100,000 watts, pour atteindre les populations du Nord de la plus grande des provinces canadiennes, le Québec. A leur intention, on prépare des informations et nouvelles, ainsi que de la musique, tout à fait particulières, que l'on diffuse non seulement en français, et en anglais, mais aussi en inuktitut, langue des Esquimaux ou Inuits, comme ils préfèrent s'appeler. Les canaux utilisés par les services de Radio Canada vers le Nord du Québec comportent les 6065, 6195, 9625, et 11720 kHz. Certains d'entre eux s'entendent à travers l'hémisphère Ouest et aussi, à un moindre degré, en Australie/Nouvelle Zélande et même en Europe.

Radio Canada possède un excellent service extérieur qui se capte facilement, Radio Canada International (RCI). Les programmes divers de RCI sont réalisés pour être diffusés sur les bandes internationales, par exemple l'émission "Le Matin des Canadiens", diffusée à 1200 UTC. Elle retransmet également les meilleures actualités de Radio Canada, entre autres, "Radiojournal" et "Présent" que l'on entend tous les jours de lundi à vendredi. Grâce à de nombreux auditeurs étrangers,ainsi qu'aux Canadiens voyageant ou séjournant dans les pays desservis, RCI est devenue l'une des stations internationales les plus populaires.Des sondages Gallup, en effet, la montrent en concurrence avec la BBC pour être la station internationale la plus écoutée par l'auditoire américain.

L'utilisation des bandes internationales que se fait le Canada n'est pas en soi, certes, bien remarquable. Bon nombre de pays, effectivement, tels le Brésil, l'Inde, le Pakistan, le Bangladesh, le Nigeria, diffusent aussi sur les trois plans, local, régional, et international. Mais les émissions canadiennes sont surtout intéressantes par le fait qu'elles se font surtout en français et en anglais. Les radiophiles à l'étranger peuvent donc en profiter non seulement pour connaître davantage un vaste pays très divers, mais aussi pour exercer leurs aptitudes linguistiques.

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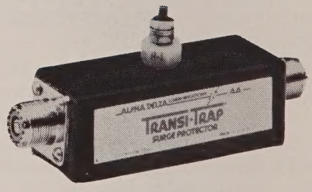

Ceramic gas tube Transi-Trap lightning surge protectors come in two models. Model LT for receivers from 0.1 to 30 MHz ($19.95) and model RT for receivers with coverage from 0.1 to 500 MHz ($29.95). At your Alpha Delta dealer or direct in the U.S. plus $2.00 shipping and handling. Exports quoted.

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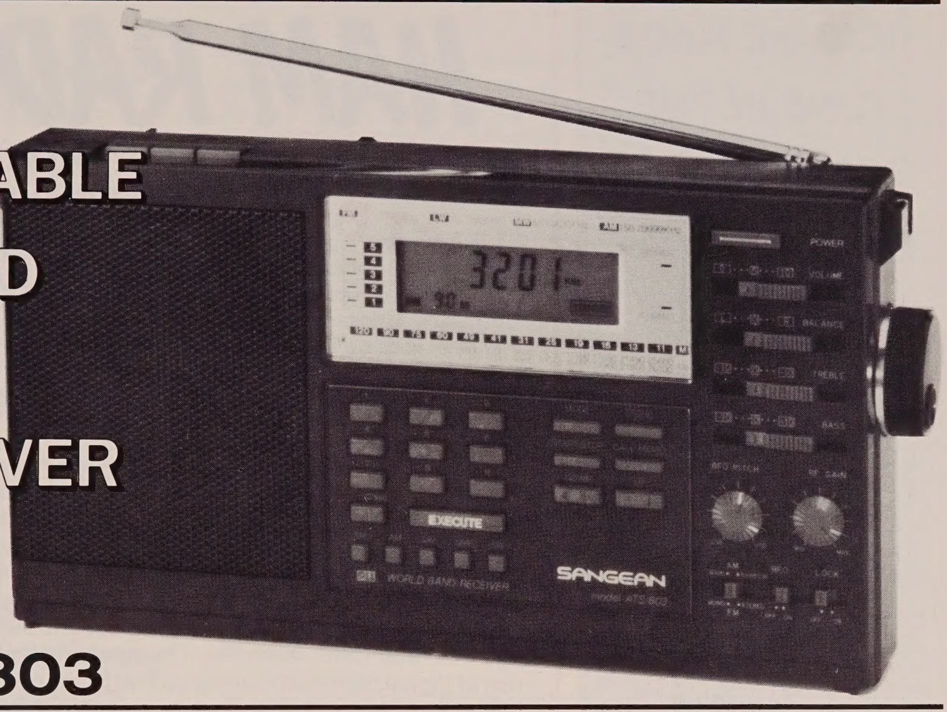

ATS-803

ITEM		ATS-803		
Wave Range	FM(MHz)	87.5 - 108		
	SW(MHz)	SW1	2.30-2.50	(120m)
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		SW3	3.90-4.00	(75m)
		SW4	4.75-5.06	(60m)
		SW5	5.80-6.20	(49m)
		SW6	7.10-7.50	(41m)
		SW7	9.50-9.90	(31m)
		SW8	11.65-12.05	(25m)
		SW9	15.10-15.60	(19m)
		SW10	17.55-17.90	(16m)
		SW11	21.45-21.85	(13m)
		SW12	25.60-26.10	(11m)
	LW(KHz)	150-281		
	MW(KHz)	520-1620		
Type		FM- Stereo (via headphone)		
Output power		1200mW		
Speaker (inches)		4		
Batteries		6x1.5V "D" = radio power 2x1.5V "AA" = u-com back up		
External power		9V = /400mA		
Dimensions (W x H x D)		11.5 x 6.3 x 2.4 (inches)		
Weight (lbs)		3.75		
Accessories		External antenna jack Shoulder Strap Wave hand book		
Features		Sleep (10-90 minutes) BFO LCD PLL-Synthesized SW band spread 9 memories		

- Full AM/FM frequency range 150-29999kHz plus FM 87.5-108 MHz
- Fine tuning functions: Direct press button frequency input, Auto scanning, manual scanning, Memory recall and manual tuning knob

  Built-in 24 hour clock and alarm. Radio turns on automatically at preset time and frequency
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- BFO control (Beat Frequency Oscillator) enables reception of SSB (Single Side Band) and CW (Morse Code) transmission
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HOW WE MADE *TUNE IN THE WORLD WITH HAM RADIO* EVEN BETTER!

The **BIG NEWS** about the League's beginner's package is that we have replaced the 60-minute cassette with two 90-minute cassettes in order to give almost three time the Morse Code instruction. Production of these tapes was a team effort. First, selected ARRL registered instructors were asked to review prototype tapes. ARRL staff incorporated the suggested improvements on the master tape. A special keying interface was designed in the ARRL lab.

The result is vastly superior to the code practice material contained in the previous editions. The popular Farnsworth method is used: the letters are sent at 18 WPM with appropriate spacing so that the actual speed is 5 WPM. The code is recorded on both stereo channels, but the voice-over is recorded only on one. Students with a stereo tape player can learn the code as the text is described on the tape, and then switch to the "code only" channel to test themselves as they go along.

The first tape is devoted to teaching the letters of the alphabet, prosigns, and numbers; the knowledge of each is required on the code portion of the Novice exam. Each new letter (or character) is sent several times, then words are sent containing previously learned letters and the new letter before going on the the next. The audio channel explains what is being sent. The first side of the second tape consists of 9 practice sessions; which are described on the tape and in greater detail in Chapter 3 of the *Tune In The World* text. The other side of the second tape consists of six sample Amateur Radio contacts for use as final practice by the student. Sample 10-question tests covering each of the QSOs are also presented in the text in order to give the student a feel for what the code portion of the exam will cover. The new tapes should made learning the code a fun experience.

We've improved the text too! Material has been added to the text to cover what the prospective Novice needs to know in order to pass the new 30-question Novice exam.

Tune In The World With Ham Radio is suitable for individual or classroom instruction. With the expanded text and improved code learning cassettes, this package should be *your* choice for Novice instruction material.

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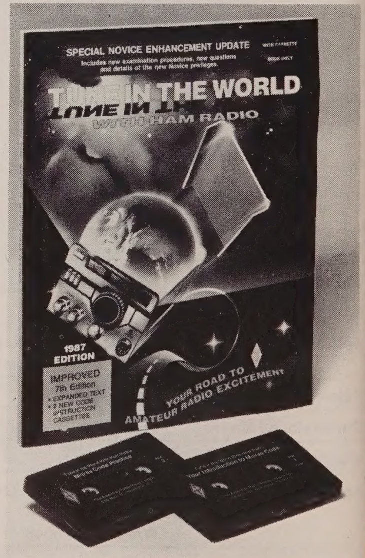
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Besides improving the text, we've added almost three times the code practice material to the package in the form of two C-90 tape cassettes. One tape teaches the code, the other provides practice. They are recorded in stereo so you can switch off the voice portion for even more practice. These new tapes make learning the code a snap!

Tune In The World With Ham Radio is available at your dealer or from ARRL for $15.00 plus $3.50 for UPS shipping and handling.

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...and here is the "RDI" for the remaining 75% of the SW spectrum:

GUIDE TO UTILITY STATIONS

from Klingenfuss Publications, the world's leading publisher in the field of nonbroadcasting stations.

Tired of those crowded broadcasting bands? Of that vicious circle of megawatt power play, interference and jamming? You are invited to discover the exciting world of commercial radiocommunication on SW which is now easily accessible by means of the new generation of general coverage receivers and decoders for facsimile and teleprinter transmissions.

The Klingenfuss GUIDE TO UTILITY STATIONS, including the famous GUIDE TO RADIOTELETYPE STATIONS (13th edition!) published since the early seventies, is the basic international reference book used by both professional and hobbyist radio monitors. It covers all types of utility stations and includes

- numerical frequency list with more than 14000 frequencies from 9 kHz to 30 MHz, each with call sign, name of station and country, modulation type and details;
- alphabetical call sign list with 2800 call signs, each with name of station and country, and corresponding frequency;
- schedules of 75 teleprinter press services on 450 frequencies in both alphabetical and chronological order for easy access;
- schedules of 70 meteorological facsimile services on 250 frequencies;
- schedule of NAVTEX transmissions on 518.0 kHz;
- 950 abbreviations, plus 180 telex services codes;
- SINPO and SIMPFEMO code, complete Q-code and Z-code;
- designation of emissions, with associated examples;
- classes of stations and type of service;
- comprehensive list of ITU terms and definitions;
- ITU frequency allocations from 9 kHz to 150 MHz;
- aeronautical and maritime mobile service regulations and frequency allocations;
- country list with 960 station addresses in 200 countries.

Pulished annually in December, the 1987 edition of the Utility Guide (ISBN 3-924509-87-5) has 473 pages plus 3 world maps. The price of 60 DM (or equivalent in your currency) includes airmail postage to anywhere in the world. Payment can be by cheque (drawn on a German bank), cash, International Money Order, or postgiro (account Stuttgart 2093 75-709). Further publications available are Air and Meteo Code Manual, Guide to Facsimile Stations, Radioteletype Code Manual, etc. All manuals are softbound in the handy 17x24 cm format, and of course written in English. For further information ask for our catalogue (available also in French, German and Spanish), list of recommendations from all over the world, and dealer discount rates. Orders received after 15 NOV 1987 will receive the 1988 edition. Please mail your order to

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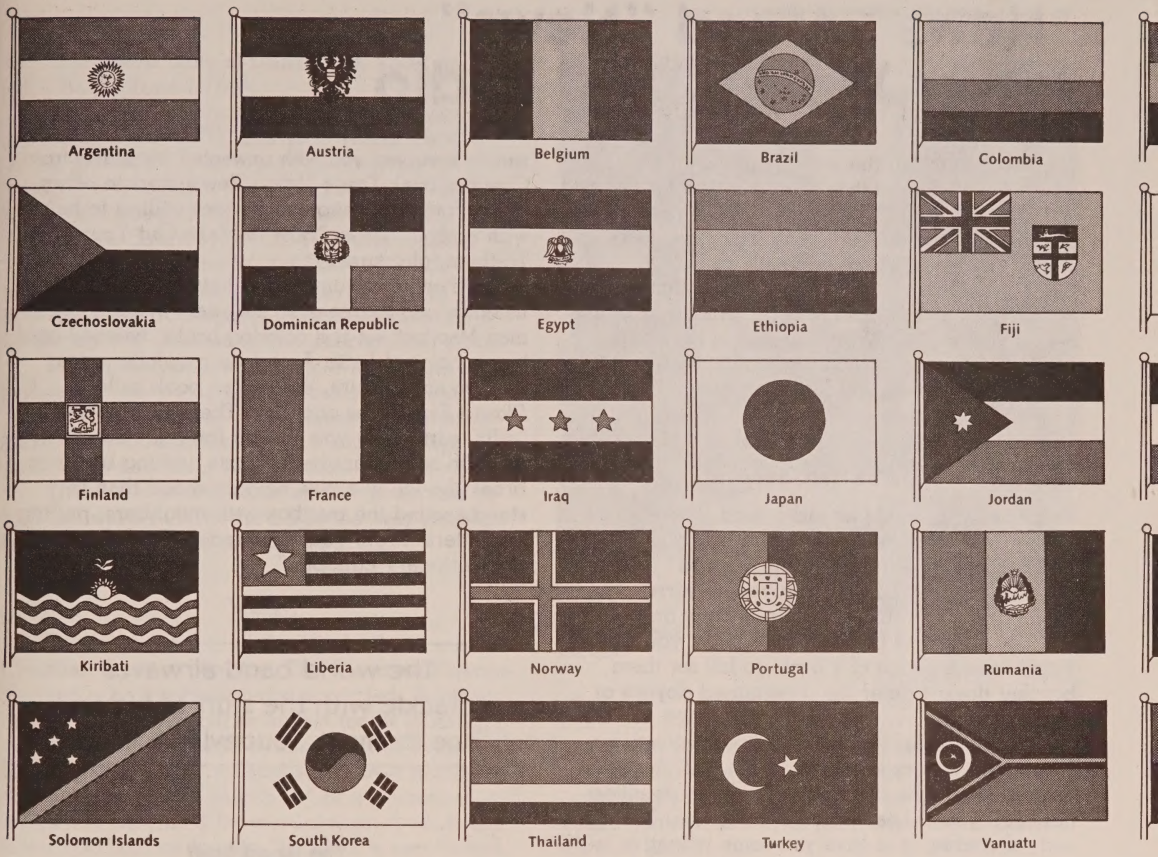
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Sony presents synchronous detection circuitry so you can enjoy clear connections with less interference.

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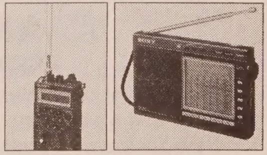

Sony World Band Radio® units around the world are clearly receiving air, marine, longwave and shortwave bands, with synchronous detection circuitry, quartz tuning and automatic search and scan.

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News . . . and "News" . . . Over World Band Radio

There's so much in the way of news over the international airwaves that one commentator calls world band radios "news boxes." With over 160 countries on the air, you can be plugged into nearly any event, great or small, on Planet Earth . . . plus some attempts at news that seem as though they are from another galaxy. From the genius of the BBC World Service to the depths of Radio Pyongyang's "news-ah," the airwaves crackle with the stuff of history one moment, vaudeville the next.

The Hard Sell

Propaganda is as old as radio itself. Even before Tokyo Rose came on the air during World War II, the airwaves have been littered with outrageous claims and incentives for surrender. From Tirana to Tehran, old Rosie lives on.

Some stations have tricks to make you listen. You'd need a prune of a brain to fall for them, but that doesn't deter the determined doyens of disinformation.

For example, Radio Berlin International encourages listeners to join its "club." All that's needed is to write them regular letters detailing how well you're hearing their programs. The object, of course, is to give you some incentive to tune them in every night. Do that for a while and you'll be mumbling about "revanchists"—the station's favorite perjorative—in your sleep.

Broadcasts from other countries along the lines of Berlin's political persuasion might try to stir your emotions with such cliffhangers as, "The Marxist-Leninist Truth Will Triumph Over Revisionist Demagogy," "People of the World Unite and Defeat the US Aggressors and All Their Running Dogs," "Reagan: Destroyer of Worlds," "Democracy: When Will the Curse End?" and Radio Moscow's tireless potboiler, "Warmongers Monthly"—which is, using appropriate logic, weekly.

Libya is in a league of its own when it comes to portrayal of Western countries. Recent shows have told incredulous listeners how the streets of New York are littered with the bodies of people who have jumped from office windows. These people, claim the announcers, have broken under the "intense psychological stress of living in a hellish, computerized capitalistic society." From stations of this ilk, even a weather forecast should be suspect.

Some broadcasters send their listeners goodies if they write. These can vary from a form letter inviting you to participate in a quiz on your knowledge of the statues on Martyr's Square, to offering a free trip to Havana. Some stations will simply bombard you with unwanted literature, from Czechoslovak Trade Union Newsletters to offers of comfort from religious stations willing to help with such things as "How to Make Out Your Will." To them, of course.

Other items rumored to have arrived in listeners' mailboxes over the years include Chairman Mao buttons and coloring books, baseball-card type photos of Latin American revolutionaries and, so some claim, an Iranian book called, *Plastic Explosives and You*. These unexpected "gifts" can follow you around for years and even through several moves. There's nothing better to break the ice in a new neighborhood than to stand around the mailbox with neighbors, pulling out letters "From Your Comradely Friends in Revolutionary Ethiopia."

The world band airwaves crackle with the stuff of history one moment, vaudeville the next

The Good Stuff

Only someone suffering from constipation of the brain can possibly sit through all six parts of the series, "Copper Wire Production in Bulgaria." But for those who do enjoy a variety of views and have the good sense to sort through them, there is a world of slants, perspectives and approaches to be sampled. For serious junkies of world events, there's almost no end to the really good newscasts that can be heard. Here are some plums.

BBC World Service

The BBC has long led the field in international news. It is, quite simply, the standard against which all other electronic journalism is measured. The BBC has no axes to grind, and so produces some of the most bias-free reports in the world. It also has a strong sense of perspective, sorting out what's important in the longer run from the fluff that tends to distract lesser news organizations.

The BBC not only is quality, it's also quantity. Aside from its twenty-four daily international newscasts, the BBC takes its responsibility even further. A number of programs—most aired daily and following the regular hourly news—offer in-depth and extensive coverage of the day's events. Arguably the best is "Twenty-Four Hours," which provides on-site analyses of the main news of the day. It is heard daily at 0509, 0709, 1309, and 2009 World Time (UTC).

"Newsdesk" is another, a three-times-daily program—0400, 0600, and 1800 World Time—where correspondents report on a variety of topics. Yet another is "The World Today," heard Mondays through Fridays at 1645 and 2209, plus Tuesdays to Saturdays at 0315, 0545 and 0915 World Time. On "The World Today," which is something a cross between a current events program and a documentary, journalists examine a single topic of interest on the international scene.

More personal commentary than straight news is Alistair Cooke's excellent weekly program, "Letter from America." This pleasurable quarter hour is aired Saturdays at 1015 and Sundays at 0545, 1645 and 2315 World Time.

There are several other similar programs as well, all worthy. With the BBC, the only problem is in finding the time to hear them all.

WCSN

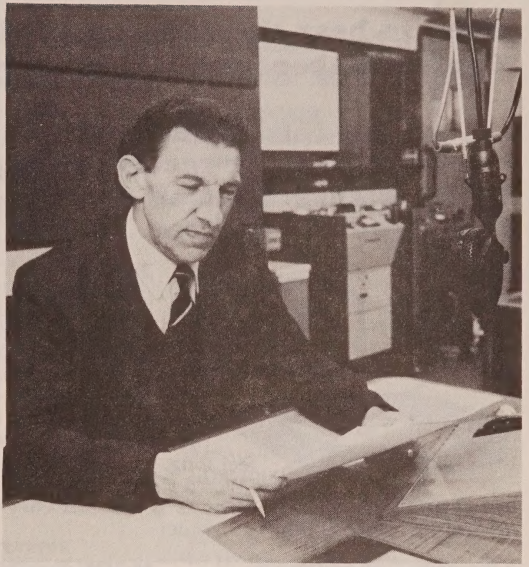
WCSN is the call sign of the World Service of the Christian Science Monitor. The Christian Science Monitor is an internationally respected, Pulitzer Prize-winning newspaper known for its thorough and unbiased coverage of international events. Despite the fact that it's sponsored by a religious organization—The Church of Christ, Scientist—religion is separated from journalism, both in the newspaper and on the air. WCSN is a very recent, and very welcome, addition to the growing lineup of world radio broadcasters. Unfortunately, because it is so new, its schedule is still in a state of flux.

World Service broadcasts are divided into two-hour segments which, Monday through Thursdays, are repeated between 1600 and 1200 World Time, plus Fridays and Saturdays between 1600 and 2400.

There's news on the hour and half hour, followed by in-depth review and analysis of the main stories. Other programs—such as "Roundtable," an informal discussion with Monitor writers and editors; "Kaleidescope," which features conversations with newsmakers; and a selection of columns from the paper itself—round out the broadcasts. For most of the rest of the day and all day Sunday, WCSN devotes itself to programs about the Christian Science religion in time slots separate from the newscasts.

Radio France International

Radio France International has dramatically increased its commitment to world band radio. Its English-language broadcasts now include the one-hour "Paris Calling Africa"—heard worldwide, its title notwithstanding, at 1600 World Time—and a number of short newscasts at, for example, 0200, 0330 and 0415.



The BBC World Service airs authoritative news every hour of the day

Radio France International's English-language newscasts provide a slightly more European outlook at what is important in world events. And, thanks to powerful overseas relay stations, it's well heard, too.

Still, the staple of RFI's broadcasts are those in French. In the past, most programs came from the popular home service, "France-Inter." Now, they're prepared exclusively for a foreign audience. On one hand, this has eliminated the silliness sometimes found on "France-Inter." But, at the same time, much of the local flavor that makes France universally exciting has been lost. At times, it's hard to tell whether you're listening to Radio France or the French service of Radio Sweden.

Armed Forces Radio and Television Service

For the American traveler who wants to stay in touch with home, there is no better source of news than the Armed Forces Radio and Television Service. AFRTS is unusual in that it most closely resembles a domestic US all-news station. The twist is that AFRTS carries all the private and public US radio networks. Twenty-four hours a day, you'll hear newscast after newscast from ABC, CBS, NBC, Mutual, AP and National Public Radio. Interspersed are network features and commentaries, plus live baseball, American football and other sporting events. Even some regional US news and weathercasts are aired.

AFRTS is, in a sense, the ultimate in non-

Make your station really perform

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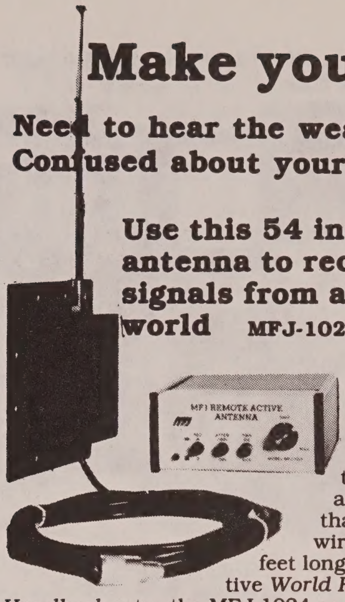

Use this 54 inch active antenna to receive strong signals from all over-the-world **MFJ-1024 . . . $129.95**

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You'll receive all frequencies 50 KHz to 30 MHz from VLF thru lower VHF - including long wave, medium wave, broadcast and shortwave bands. Mounts anywhere away from electrical noise for maximum signal and minimum noise pickup --mount on houses, buildings, balconies, mobile homes, apartments, on board ships -- anywhere space is a premium.

High dynamic range eliminates intermodulation so you never hear 'phantom' signals.

A 20 dB attenuator and a gain control prevents overloading your receiver. You can select between 2 receivers and an auxiliary antenna. Has weather-proofed electronics. Use 12 VDC or 110 VAC with MFJ-1312, $9.95.

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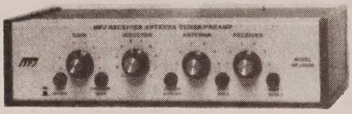

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The MFJ-959B Antenna Tuner provides proper impedance matching so you transfer maximum power from your antenna to your receiver from 1.8 to 30 MHz. You'll be pleasantly surprised by significant increases in signal strength.

20 dB preamp with gain control boosts weak stations and 20 dB attenuator prevents overload. Select from 2 antennas and 2 receivers. 9x2x6 inches. 9-18 VDC or 110 VAC with MFJ-1312, $9.95.

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Enjoy new excitement and variety as you listen to the world while driving with these low cost mobile shortwave converters. Choose the MFJ-304 'World Explorer I' that covers 19, 25, 31 and 49 meter bands or the MFJ-308 'World Explorer II' that adds 13, 16, 41 and 60 meter bands for total shortwave broadcast coverage.

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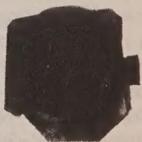

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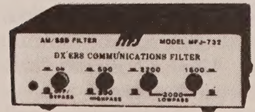

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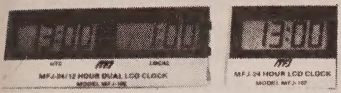
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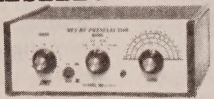

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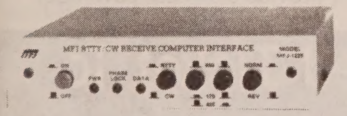

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propaganda radio. Instead of airing broadcasts spoon-fed abroad by government functionaries, AFRTS offers an insider's look into what's actually going on in the US. Indeed, it's not only Americans that listen in. In some parts of the world, the AFRTS has been known to pull a larger English-language audience than the US government's official Voice of America.

Because the AFRTS exists solely to reach American armed forces personnel, it's difficult —even impossible—to hear clearly in many parts of the world. In Europe, for example, it's often audible only via a small single-sideband transmitter used, usually on 9334 kHz, to feed programs to the Azores. Lately, for whatever reason, this transmitter—which is fairly well-heard throughout southern Europe—has been on the air only every now and then.

Voice of America

Mention the VOA's news to any group of regular world band listeners or journalists, and you may well start an argument that's best walked away from. The Voice of America is, like the BBC, a government-sponsored organization. But, unlike the BBC, it's clearly a mouthpiece of the government. Another drawback is that, unlike AFRTS, it airs nearly no news about events in the US unless they concern politics.

There is a real concern as to whether the Voice, structured as it currently is, can present truly unbiased news. Still, the talent and resources at the VOA are considerable. Cynics notwithstanding, the Voice does air a number of international news and analysis programs of merit.

Regional Newscasts

Listeners with an interest in a particular part of the world can tune in any of a number of stations with newscasts that include regionally—as opposed to internationally or nationally— oriented newscasts. Sometimes these stations are in the region itself, sometimes they're not. But most are quite good and nearly all are vastly superior to what you'll find in your local media.

For example, for Nordic news try Radio Finland's excellent "Northern Report" or the newscasts of Radio Sweden International. Latin America is not yet well-covered by English-language broadcasts. But if your heart is in Asia, you can try Radio Australia, Japan's NHK or even the BBC's Asian Service. For Africa, try Radio France International or the BBC's African Service, both of which provide excellent coverage.

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Vladimir Posner: Not Your Average Russian

World band radio listeners have known the name Vladimir Posner for almost two decades now. In the years since 1970 when he first joined the staff of Radio Moscow, Posner quickly developed into one its most visible "personalities" on a station that, until recent years, was not known for personality at all.

What makes this man different from his colleagues is that he understands not only American English but the people who speak it. And in the end, that's what makes him so effective in the Soviet Union's campaign to win hearts and minds in the West. On a station where other announcers tend to sound as if they are shouting from textbooks positioned twenty yards from the microphone, Posner comes off like the fellow next door. Posner is unquestionably likeable, even charming.

Says Alex Beam, former Moscow correspondent for *Business Week*, "He takes advantage of our stock negative image of the USSR as an awful, benighted country where if you ask to go to the bathroom, you're sent to Siberia. [And it's because he presents] such a radically different image . . . that Posner can come to our country and score very big in our public opinion marketplace."

Posner, not surprisingly, agrees. "I feel that most Americans have been bamboozled, to use an old word, to the point where when anything half normal comes out of the Soviet Union, they are surprised . . . I mean, they have made the Soviets such bogeymen, as it where, that when you get someone who is normal, they just go 'uhhh.' "

"He shows himself to be a flesh and blood person," says Beam. "Prick me, and I bleed. It's perhaps a very human image of the Soviet Union that's very desireable . . ."

So what is Posner, a peace missionary or a treacherous propagandist?

Arnold Zenker, one of America's most successful media coaches, compares watching Posner on TV to "being a violinist and watching Isaac Stern." But is Posner a manipulator? Says Zenker, "I think he is. I think he understands very well what he's trying to get across. Is he any more calculating than one of our politicans; say, Ronald Reagan? Probably not. Is he any more calculating than some of the business people I work for? Probably, but only because they don't understand the medium as well."

What is unquestioned is that Posner has become the voice of the Soviet Union in the US. And he's in a unique position for the job because both countries figure prominently in his past.

Posner was born to a French Catholic mother and a Jewish Russian father. His family lived in Paris until 1940 when they fled Nazi-occupied France for the US.

"From a rather early age, I was aware there was another country called the Soviet Union. My father talked to me quite a bit about what socialism was, and why it was a more just society compared to other societies. And gradually that took hold."

When he was in grade school, differences between the US and Russia were put aside as both joined forces to fight the Nazis. It was during Posner's schoolyears that his father really started to emphasize the family's national origins.

"When the Germans invaded the Soviet Union, my father bought a map and he would draw in the German advances in black pencil, And every evening, he would say, "They will never win. They will never take Moscow. They will never take Leningrad." That was the beginning of my political education."

The conclusion of World War II marked the end of hostilities in Europe and the beginning of hostilities toward the thirteen-year-old Posner in the US. It all began after Winston Churchill's Fulton, Missouri, speech, about the Iron Curtain in 1946. "I didn't agree. I defended the Soviet Union. And that led to some problems. I remember when six or seven kids ganged up on me for being a commie and I was bloodied up."

His filmaker father also began experiencing problems at this time. Then he received an offer to work in Soviet-controlled East Germany. Posner was pulled out of classes at New York's Stuyvesant High School and the family immigrated for the second time.

"My father is Russian Jew and you see what the Germans have done to Russia. My mother is French and the French aren't the greatest fans of Germany." In 1952, Posner's father was invited to come to Moscow. But the Soviet Union proved no more hospitable to the Posners than did East Germany.

"We arrived in December of '52 when Stalin was still alive. People are afraid of foreigners. So it turns out we have no apartment, we live in a hotel, and my father can't get a job. Frankly, if Stalin hand't died on March 5th, I think things would have gone very poorly for us. I think my father would have joined those who were sent to some camp in Siberia, And my mother too. And perhaps even myself."

After Stalin's death, however, things changed quickly. "My father got a job. And I enrolled in Moscow U." Five years later, Posner graduated

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This article, based on the program "Not Your Average Russian," was prepared in cooperation with WGBH-Boston, Steve Atlas, Producer.

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and began working his way up in the Soviet literary establishment—a path that would eventually make him a celebrity both in the Soviet Union and the United States.

Since then, Posner has worked in print, on radio and as a TV commentator. But the medium he seems most committed to is the "Spacebridge," a live TV broadcast between the US and the USSR in which audiences in both countries can talk to one another by satellite.

"It's the image of the Russian. And you've got this squat, fat, bushy eyebrow, large jaw, strong accent. It's part of the picture that's been drawn over the years that reflects the bias and the way Russians are supposed to be."

US television talk show host Phil Donohue figures prominently in the Posner strategy. His program gives gives Posner a direct link to a vast block of middle America. On May 15, 1986, Posner returned to the US after 38 years behind the Iron Curtain. He is now an international media star, set to appear before some eight million American viewers on *Donohue*.

Posner is a success. He is smooth, charming and funny, as this series of exchanges shows.

Donohue: "How do we [America] look after 38 years?"

Posner: "When I walked out on the streets, it was a very emotional thing for me. I've dreamed about it. Because, regardless of being a Soviet

Radio Moscow's Vladimir Posner has become familiar to millions of Americans through his appearances with US talk show host Phil Donohue

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citizen, I love New York."

Donohue: "Are you a Party member? You are, I assume."

Posner: "You assume right."

Donohue [jokingly]: "You're a real 'commie.' "

Posner [pausing, smiling]: "Uh, huh."

Audience: Laughter.

Donohue: "Don't you think this [country] is a great democratic idea. You've got to be impressed."

Posner: "When I walk up Park Avenue and I see people living in the streets, I say to myself, that is not a fair society. It should not be in a society so incredibly rich as the United States. We are a poor society. No one lives in the streets. No one."

> **It is unquestioned that Posner has become the voice of the Soviet Union in the U.S.**

Says Donohue, "We flatter Mr. Posner with our anxiety. Let's listen to the man. If we doubt, we doubt. Let's question, let's challenge,let's even get angry. It's all of those things allowed in our Constitution. But I must not tell a lie. I like him."

Not everyone does.

Reed Irvine, head of the conservative press watchdog organization, "Accuracy in Media," states flatly that "Mr. Posner doesn't express views. For the most part, he tells disinformation or lies."

Marshall Goldman, who runs Harvard's Russian Research Center, has studied the Soviet Union and Vladimir Posner. "When we watch Posner on television, what we have to keep in mind is that he has a line he is trying to peddle. You just have to decide, 'Do I want to buy a car from that man? Am I prepared to take the warranty that he is offering?'"

Says Beam, "He's not a con man any more than Dan Rather or Phil Donohue or Tom Brokaw is a con man. This guy is a spokesperson. He articulates views that are formulated partly by himself and partly by others."

Marshall Goldman ends on a more cautionary note. "When there's an issue that confronts the the two countries, we immediately have someone we can turn to. He misleads us in many respects. But at least we have the chance to enliven and enlarge the debate. And I think that he does this. But I don't think he has changed public policy. I think we're still too sophisticated for that."

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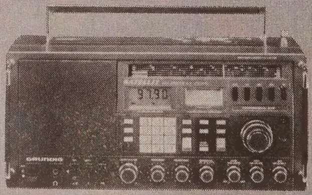
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Ghana: Radio Gold Worth Digging For

by Maud Blankson-Mills

Broadcasting in Ghana first saw the light of day under the British Colonial Government, when the country was known as the Gold Coast and was ruled by the then-Governor, Sir Arnold Hodson. The inaugural radio station, ZOY, came on the air in the capital city of Accra in 1935.

Broadcasting Inaugurated with Fleapowered Transmitter

ZOY began its life with a minuscule 10-watt transmitter operating out of a bungalow. As would be expected in a British colony, the station concentrated on relays of the BBC, plus news and music in a few local languages. Only about three hundred nearby "subscribers" were able to hear the broadcasts.

In order to expand the audience, construction of relay stations began the next year in the cities of Cape Coast, Sekondi, Kumasi, and Koforidua. By the time World War II got underway in 1939, the Gold Coast had a total of sixteen stations for transmitting war news in the English, Twi, Fante, Ga and Ewe languages, with Hausa added later on. Programming emphasized the progress of the war and how Ghanaian servicemen were faring at the front.

A pioneering version of world band radio entered the picture that same year. The inauguration took place at Broadcasting House in Accra with the installation of a 1.3 kW transmitter operating on 4915 kHz. The station officially signed on the air in 1940, broadcasting to the Gold Coast and other neighboring countries.

Major Pan-African Broadcasting Follows Independence

By the time Ghana gained its independence in 1957, the country had already learned about the important benefits of world band radio. A new Broadcasting House—still in use—was built, complete with new studios, offices and a new 20 kW transmitter audible throughout West Africa and even beyond. The station continued to rely on the BBC for much of its programming, but now a different emphasis was added: the projecting to Ghanaians and fellow West Africans of an "African Personality," as well as the fanning of nationalism and President Kwame Nkrumah's brand of Pan-Africanism.

Author Maud Blankson-Mills peruses listener mail

As time went on, programming continued to become more African in nature. There were African news bulletins, programs projecting Ghanaian and African culture, as well as special shows for freedom fighters in various parts of the world.

At the same time, both the Schools' Broadcasts Department and the Rural Broadcasts Department took to the airwaves in an effort to assist in the government's policy of accelerated education. Schools' programs supplemented classroom teaching for young people, while the Rural network concentrated on adult topics, such as agriculture, maternal health care, nutrition and self-help. Shortly after the Rural broadcasts began, a "Rural Radio Forum" was instituted, allowing regular feedback from remote villages.

Mighty Transmitters Present Africa to the World

In 1961, when most world band stations were struggling with transmitters of 100 kilowatts or less, Ghana introduced its External Service, using two new 250 kW units located at Ejura. It was, at that time, one of the most powerful stations on the air. Except for Ghana, only the largest nations—notably China, Russia and the United States—possessed world band transmitters of this magnitude. Programs were beamed to listeners throughout Africa, as well as Europe, North America,

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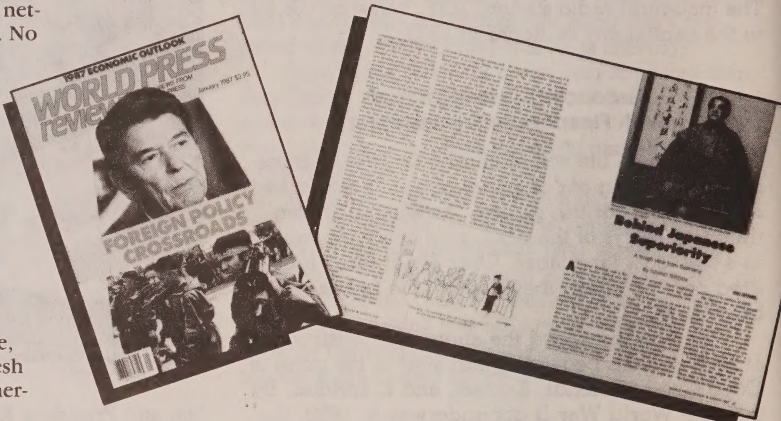
Maud Blankson-Mills is Head of Audience Research at the Ghana Broadcasting Corporation.



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Japan and Australasia. The rhythms of "Ghana Is Free" mirrored African pride throughout the world.

Today, over 99 percent of the Ghana Broadcasting Corporation's programming is locally produced and the station is manned entirely by Ghanaians. The basic philosophy of broadcasting in the country remains the same, but the Ghana Broadcasting Corporation has, in the meantime, increased to three the number of services available to world band listeners: Radio One, Radio Two and the External Service (see box).

How to Tune in Ghana

Radio One

Ghana has three world band radio networks. However, of these the most commonly heard outside Africa is Radio One. Radio One is on the air Mondays through Fridays from 0525–0905 and 1200–2305, weekends 0525–2305 World Time (UTC), on 4915 kHz. The best chance to hear it outside Africa is during the winter just after sign-on and again right before sign-off.

Radio One carries programs in English and six local languages—Akan, Dagbani, Ga, Ewe, Nzema and Hausa—for both the rural and urban population. While the emphasis is still on agricultural development, other information includes news, commentary, readings from the Ghanaian press, school broadcasts and important addresses by Head of State, Flt. Lt. John Rawlings. Nine million of the 12.5 million people in Ghana reportedly listen to Radio One.

The facilities of Radio One are also used Mondays through Fridays during the school year from 0910–1050 to carry the Schools' Broadcasts.

Radio Two

Radio Two is the Commercial Service, supported by advertising, with programs in the same languages as Radio One. The local audience is estimated at about 9 million.

Radio Two is on the air daily from 0525–0905 and 1705–2305 World Time (UTC) on 3366 kHz, plus 0905–1152 weekends and 1152–1705 daily on 7295 kHz. 3366 kHz is audible in Europe during wintertime, but in the Americas it is somewhat harder to receive. 7295 kHz is usually not well heard outside Africa.

External Service

The External Service, which was suspended in 1982 because of deteriorating equipment, returned to the air at lesser power—100 kW—only last year. Broadcasts are intended for West African audiences, but are also occasionally audible near the hours of darkness in some other parts of the world. English, with a smattering of Portuguese, is aired daily from 0645–0800 and 1845–2000 World Time (UTC) on 6130 kHz. French is broadcast daily from 0800–0900 and 2000–2100 on the same channel.

Good Receiving Equipment Helpful

Ghana is typical of many of the Third World countries that operate on world band radio in that the signals are weak and have to struggle against much stronger signals put out by larger broadcasters.

When listening conditions are right, a number of these smaller stations can be heard on simpler portables. However, the odds improve if you use one of the higher-quality portables or, better, a highly rated tabletop receiver with a properly mounted outboard antenna. Full details on these are given in the "Buyer's Guide" section.

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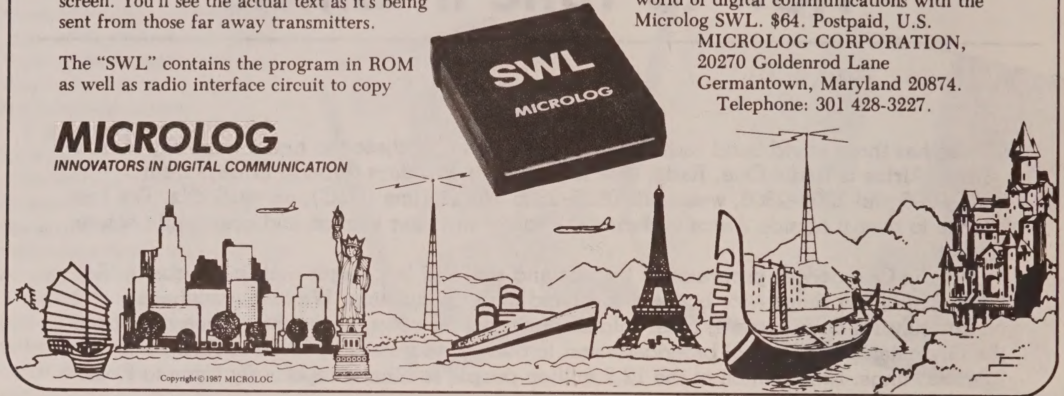

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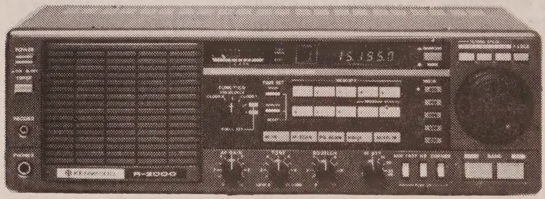

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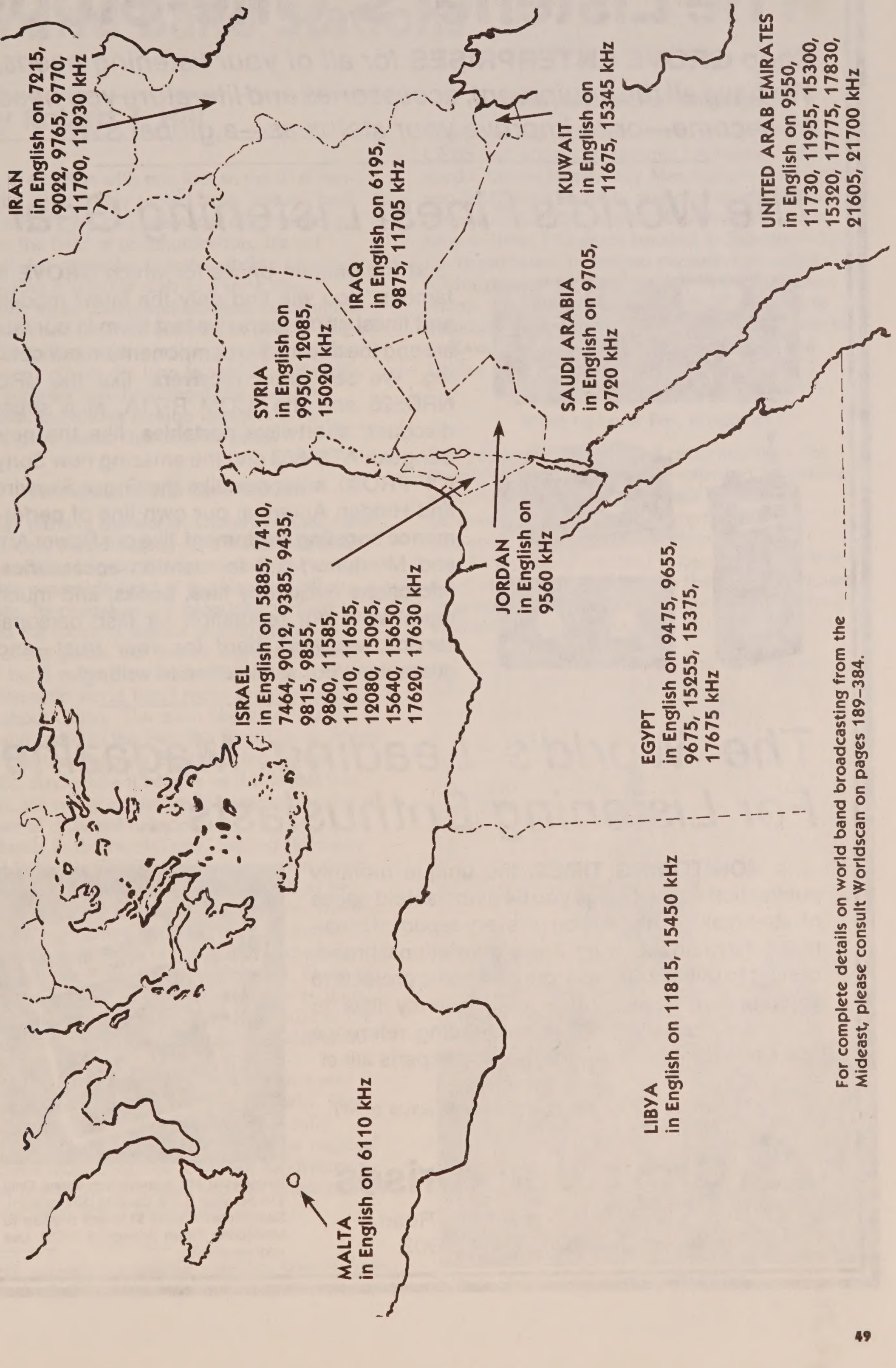

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in English on 7215, 9022, 9765, 9770, 11790, 11930 kHz

IRAQ
in English on 6195, 9875, 11705 kHz

KUWAIT
in English on 11675, 15345 kHz

UNITED ARAB EMIRATES
in English on 9550, 11730, 11955, 15300, 15320, 17775, 17830, 21605, 21700 kHz

SYRIA
in English on 9950, 12085, 15020 kHz

SAUDI ARABIA
in English on 9705, 9720 kHz

ISRAEL
in English on 5885, 7410, 7464, 9012, 9385, 9435, 9815, 9855, 9860, 11585, 11610, 11655, 12080, 15095, 15640, 15650, 17620, 17630 kHz

JORDAN
in English on 9560 kHz

EGYPT
in English on 9475, 9655, 9675, 15255, 15375, 17675 kHz

MALTA
in English on 6110 kHz

LIBYA
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For complete details on world band broadcasting from the Mideast, please consult Worldscan on pages 189–384.

Cartography: Robin Miller

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China's Potpourri of World Band Stations

by Robert J. Hill

China is a nation with one foot in the 21st century, the other firmly rooted in its historic past. The clash of past and present is often obvious, even in the field of communication. It's not unusual, for example, to see a worker on a bicycle hauling a satellite dish to a work site.

Still, when cheap and efficient communication is needed for over one billion people spread over 3.6 million square miles, the Chinese do what many others do: turn to world band radio. It's in constant use throughout the People's Republic and allows foreign listeners a very special peek inside this unusual land.

Numerous World Band Outlets

In many parts of the world, China's official external service, Radio Beijing, is a favorite among those seeking to gain a more meaningful insight into this venerable land of the Han and other peoples. Its programs are broadcast virtually around the clock in dozens of languages to all parts of the globe. But there's more to Chinese world band radio than Radio Beijing.

Domestic world band radio proliferates throughout China. The main headquarters for domestic radio in the People's Republic of China is the Central People's Broadcasting Station (CPBS). And while it sounds as if it is just one station, it's really an umbrella organization for a number of different networks.

Based in the capital city, Beijing (formerly called Peking), CPBS operates two national networks, "CPBS-1" and "CPBS-2," as well as two networks beamed to Taiwan. In addition, there is a fifth service aimed at the so-called "domestic minorities"—residents of the country whose language is other than Standard Chinese. These programs are relayed to outlying areas by regional and provincial stations scattered throughout the country. They are also broadcast directly from Beijing.

World band radio in China does not end with Radio Beijing or the CPBS networks. The People's Republic of China comprises fully twenty-one provinces, five "autonomous regions" and three municipalities. Of these subdivisions, all but five of the provinces and the municipalities operate local world band stations.

What to Look For: Languages

Except for the domestic minorities services, most CPBS and provincial stations broadcast in Standard Chinese (essentially Mandarin)—although if you listen long enough, you may catch English lessons on CPBS-1 and CPBS-2 channels from time-to-time. Programs beamed to Taiwan—which the government in Beijing considers merely an errant province of the People's Republic—carry Amoy, Hakka and other dialects in addition to Standard Chinese. Minority service programs are in Kazakh, Korean, Mongolian, Tibetan, and Uighur.

What to Look For: Programs

Ten years ago, world band programs from the People's Republic were characterized by strident rhetoric, revolutionary Chinese music, and generally, a heavy-handed approach to its audience.

Today, programming is based more on the need to entertain and inform than to indoctrinate. In some places—notably southern China, where Western-sounding programs roll in over the air-

A Trade Ministry somewhere outside Peking

Bob Hill, currently a promotional writer, was formerly a radio monitor for the US government.

Today, world band radio in China is designed to entertain rather than indoctrinate

waves from Hong Kong—local stations work extra hard to try and build an audience. Still, some traditions die slowly. So you can still hear such programming relics as vigorous wake-up exercises, complete with insistent one-two-three-four cadences, at the crack of Chinese dawn. Overall, though, Chinese world band radio has changed in a way that both Chinese and overseas listeners seem to enjoy.

What to Look For: Identification

With a multiplicity of world band stations on the air and the fact that many nations are intent on reaching China with their own broadcasts, it is not always easy to be sure whether you're actually listening to a station in China or, say, the Voice of America's Chinese programs. Fortunately, there are several characteristics of the Chinese domestic stations that make them easy to identify.

- When the top of the hour arrives, you'll hear six "time pips" with the final pip being exactly on the hour and an octave higher than the first five. Many stations around the world use time pips, but no other has exactly this combination of sounds.
- After the pips, the announcer will say several words, which are followed by "Renmin Guangbo Dientai." That phrase means "People's Broadcasting Station," and it's the last part of virtually every CPBS regional and provincial station identification. But that's only half the identification puzzle, because the words preceding those will reveal specifically which station you're hearing.

  If you're listening to the national network itself, the "Renmin Guangbo Diantai" will be preceded by the word "Zhongyang," which means "Central."

  If it's a provincial station—from, say, Gansu—the word "Gansu" will precede the "Renmin Guangbo Dientai."

  As for the minority services, remember that they are not in Standard Chinese. So listen, instead, for a rendition of the Chinese Communist hymn, *The East is Red*, at the beginning of each broadcast.
- Many local stations relay news from CPBS on the hour, much as local stations in North America relay ABC or the CBC. Don't be fooled! Stick around for a *local* identification at the conclusion of the CPBS newscast.
- Unlike stations in a number of other countries, the majority of domestic stations in the People's Republic of China remain on the same channel or channels for many years at a clip. Too, most Chinese domestic outlets operate outside the internationally allocated world radio broadcasting bands. This makes them easier to pinpoint as being located in China.

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When and Where to Look

A number of generalizations can be made about the best times and places on the dial to find Chinese domestic stations. CPBS outlets tend to utilize lower frequencies—under 10 MHz during their hours of local darkness—moving to higher frequencies during the day. This is to make them easier to receive within China.

Domestic world band radio proliferates throughout China

As a rule, you're not limited to a single spot on the dial for a particular station, as almost all use more than one frequency at the same time. And most domestic transmitters are of modest power by international standards. Although 100 kW transmitters are sometimes used, 10, 15 or 50 kW is more common. Nevertheless, these are strong enough to generate a respectable signal continents away.

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Latin America, Land of Traditional Music

by Don Jensen

According to Peruvian mythology, Viracocha, the god of creation, rose from the foam of the sea and gave to his people the gift of music.

Viracocha's ear wasn't attuned to the music of the West, so he taught his people a pentatonic musical scale: E–G–A–B–D. The Incas responded by using their native instruments—the quena, pinkillo and drums—to create an eerie, almost Asian-sounding music. These strains, loosely called "Andean," are heard today over world band stations through most of western South America. Mixed with the Spanish guitar of the conquistadores and some European rhythms, these have evolved further into the spirited *huayno*.

Simon and Garfunkel Create Andean Hit

It was the huayno that inspired Peruvian folklorist Daniel Alomia Robles. Back at the turn of the century, Alomia traveled through the mountains, across the *altiplanos* and into the valleys of his country to study the music of the people. In 1912, drawing on traditional themes he had learned, he wrote the most famous huayno of all, "El Condor Pasa." The tune, in memory of the fierce bird of the Andean heights, was later recorded by the internationally known duo of Simon and Garfunkel. It was thus that the huayno had its first million-selling hit.

Today, the memory of Simon and Garfunkel's tune has faded. But back in the Peruvian Andes where the huayno began, it's very much alive and kicking. Sung in either Spanish or Quechua, it continues to delight listeners of all ages.

The huayno isn't limited to Peru, though. It's also a hit across the Bolivian border, where it's often spelled *huaino*. In this version an instrument called the *siku* prodominates.

The siku consists of about six bamboo tubes of varying lengths, stuck together. The musician plays his instrument much as a youngster would blow across the mouth of a Coke bottle. The result, especially on the low notes, is a haunting, breathless sound. The omission of certain notes from the descending scale imparts an inherent sadness to the music.

Troupes That Snore in Ecuador

Although you might not notice it right off, there is a difference between the music of Peru and its

---

Don Jensen, whose interest in Andean world band radio goes back several years, has traveled widely throughout Latin America.

Folkloric musical group from Imbabura, Ecuador

northern neighbor, Ecuador. The two types of Ecuadorian music most commonly heard on world band radio are the *pasacalle* and the *pasillo*. The pasacalle features both traditional Indian influences and a local native flute. This flute's distinctive low sound has led it to be dubbed *el roncador* . . . "the snorer." Fortunately, it sounds better than the spousal variety!

Pasillos are lamentations, sadness over love gone sour. The titles don't let you forget. Try "*Lagrimas*," "*Dos Lagrimas*," "*Cuatro Lagrimas*," and "*Vaso de Lagrimas*"—literally "Tears," "Two Tears," "Four Tears" and, for a good cry in your *cerveza*, "A Glassful of Tears."

Come Back to the Five and Dime, Carmen Miranda

The music of Argentina is no stranger to Europe and America, although the tango is now considered a bit *passé*. No less romantic, however, is the cool Brazilian samba. Also from that vast land—Brazil is the world's fifth-largest country—comes the bossa nova. It's a relatively new form of music which mixes the samba with jazz.

Moving northward into Colombia brings the world band listener to the tropical rhythm of the cumbia. Tropical suggests "hot," and the rhythm of the cumbia is as hot as a horse's gallop: rat-tat-tat, rat-tat-*tat*! The popular cumbia has emigrated throughout Latin America, so you're as likely to hear this sound from stations in Guayaquil, Ecuador, as you are from Bogotá, Colombia.

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TGVN, "La Voz de Nahuala," is a friendly station specializing in traditional Indian music

Traditional Instruments Thrive

The harp plays an important role in the music of two South American nations, Paraguay and Vene-

How to Listen to Traditional Latin American Music

There are hundreds of world band radio stations in South and Central America. Many, sometime during their daily schedules, play traditional national music. The trick is how to hear them. Few are intended to be heard worldwide, so most operate at very low power, making them a challenge to receive half a world away. And there are so many signals on the air that they often interfere with each other.

So the first requirement is that you have good receiving equipment. It doesn't have to be a superset . . . just something above average, and preferably with a good antenna, to boot. Look for models with at least a three-star rating in our "Buyer's Guide." And, among these, look for those with superior ability to bring in tough signals. Antennas are also reviewed in the "Buyer's Guide."

The second tip to succeed is to listen during the months of maximum darkness—winter and the equinoctial months of autumn and early spring. The signals you're seeking travel best at that time of year, and static from thunderstorms is down.

The third "must" is timing. Just as you wouldn't show up for a dinner banquet at 10:30 AM, so you shouldn't expect much if you poke around for Latin signals at high noon. The night time is the right time. Just make sure it's night—or at least dusk or dawn—not only at your location, but also in the country you're trying to receive.

For example, in eastern North America the fun starts in the pitch dark of early morning around 0800 World Time (UTC), when the Brazilians begin to roll in. From then until shortly after your local sunrise the full complement of Latin countries makes its appearance. In the evening a variety of signals begins to roll in just before sunset and continues until they bid *adios* to their listeners some hours later.

In Europe, mornings are duds. But from late afternoon until you nod off, you can hear excellent examples of traditional Latin American music.

Latin stations, like peanuts, tend to be addictive. Some listeners spend hour after hour tuning listening to as many as they can unearth. But, so you can get started, here are some potential catches.

zuela. Because it has only one regularly operating world band station, Paraguay is not the easiest place in the world to hear. It's a pity, too, as the Paraguayan *polca*—a lively variation of the traditional polka, but played with a large harp —is immensely popular at beer-swilling festivities. The haunting Paraguayan *guarania*, the music of lovers longing for each other's presence, is no slouch, either. It's considered the most beautiful of its type in South America and is one of the musical gems of world band radio.

In Venezuela, the tempo is up and a smaller harp is heard. The best example of this is the national toe-tapping rhythm called the *joropo*. The beat—well heard over the air—is fast and sharp.

North, along the isthmus of Central America, up-tempo music also prevails. In Guatemala, and even El Salvador, the music is easily recognized by the instrument rather than the rhythm. The unmistakable marimba, the famous wooden xylophone, dominates.

Finally, there's familiar Mexico. Here two types of music dominate, the *mariachi*—popularized by Herb Alpert and the Tijuana Brass—and the *ranchera*.

Mariachi includes the violin, bass guitar and, of course, those indispensible trumpets, playing in "thirds." Ranchera is the untamed cowboy music of the northern Mexican states. With the ranchera you'll be treated to wailing accordions, guitars and vocalists. Once heard—it can be daily fare on Spanish-speaking AM stations in some US cities—it's easily recognized.

Latin America represents only one part of the worldwide musical mosaic heard over world band radio. But it's also one of the most fascinating. If you have a first-class listening setup, listen in and enjoy!

Author Jensen strolls through El Ejido Park on a drizzly Quito day

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Bolivia	Radio Fides, La Paz	4845, 6155 kHz
	Radio Illimani, La Paz	4945 kHz
	Radio Panamericana, La Paz	6105 kHz
Brazil	★Radiodifusora do Maranhão, Saõ Luís	4755 kHz
	★Radio Clube do Pará, Belem	4885 kHz
	Radio Brasil Central, Goiânia	4985 kHz
	★Radio Rio Mar, Manaus	9695 kHz
	★Radio Guaíba, Pôrto Alegre	11785 kHz
	★★Radio Clube Ribeirão Preto, Ribeirão Preto	15414 kHz
	★Radiodifusora do Amazonas, Manaus	4805 kHz
	★★Radio Nacional, Manaus	4845 kHz
	★★Radio Nacional, Brasília	6180, 11780 kHz
	★Radio Inconfidência, Belo Horizonte	15190 kHz
Colombia	★Radio Cadena Nacional, Bogotá	6160 kHz
	★La Voz de la Selva, Florencia	6170 kHz
	Ondas del Orteguaza, Florencia	4975 kHz
	La Voz de Yopal, Yopal	5050 kHz
	La Voz de los Centauros, Villavicencio	5955 kHz
Ecuador	★Radio Quito, Quito	4920 kHz
	★Radio Rio Amazonas, Macuma	4870 kHz
	La Voz del Napo, Tena	3280 kHz
	Radio Centinela del Sur, Loja	4890 kHz
	Radio Federación, Sucúa	4960 kHz
	★★HCJB, Quito ("Musica del Ecuador" program)	9870, 11910, 15155 kHz
Guatemala	Radio Maya de Barillas, Huehuetenango	3325 kHz
	★La Voz de Nahualá, Nahualá	3360 kHz
	Radio Tezulutlán, Cobán	3370 kHz
	★Radio Chortís, Jocotán	3380 kHz
Mexico	XEQQ, "La Q," Mexico City	9680 kHz
	Radio Huayacocotla, Huayacocotla	2390 kHz
	XEUJ, Linares	5980 kHz
	XEQM, Mérida	6105 kHz
Paraguay	★★Radio Nacional, Asunción	9735 kHz
	Radio Encarnación, Encarnación (irregular)	11941 kHz
Peru	Radio San Martín, Tarapoto	4810 kHz
	Radio Huancavelica, Huancavelica	4885 kHz
	★Radio Andina, Huancayo	4996 kHz
	Radio Los Andes, Huamachuco	5030 kHz
	Radio Unión, Lima	6115 kHz
	★Radio Amistad, Soritor	8515 kHz
	Radio Continental, Arequipa	6055 kHz
	Radio Tacna, Tacna	9486 kHz
Venezuela	★Radio Nacional, Caracas	5020 kHz
	★Radio Rumbos, Caracas	4969 kHz
	★★Ecos del Torbes, San Cristóbal	4980 kHz
	Radio Valera, Valera	4840 kHz
	Radio Táchira, San Cristóbal	4830 kHz
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It's the best data modern weather technology can provide

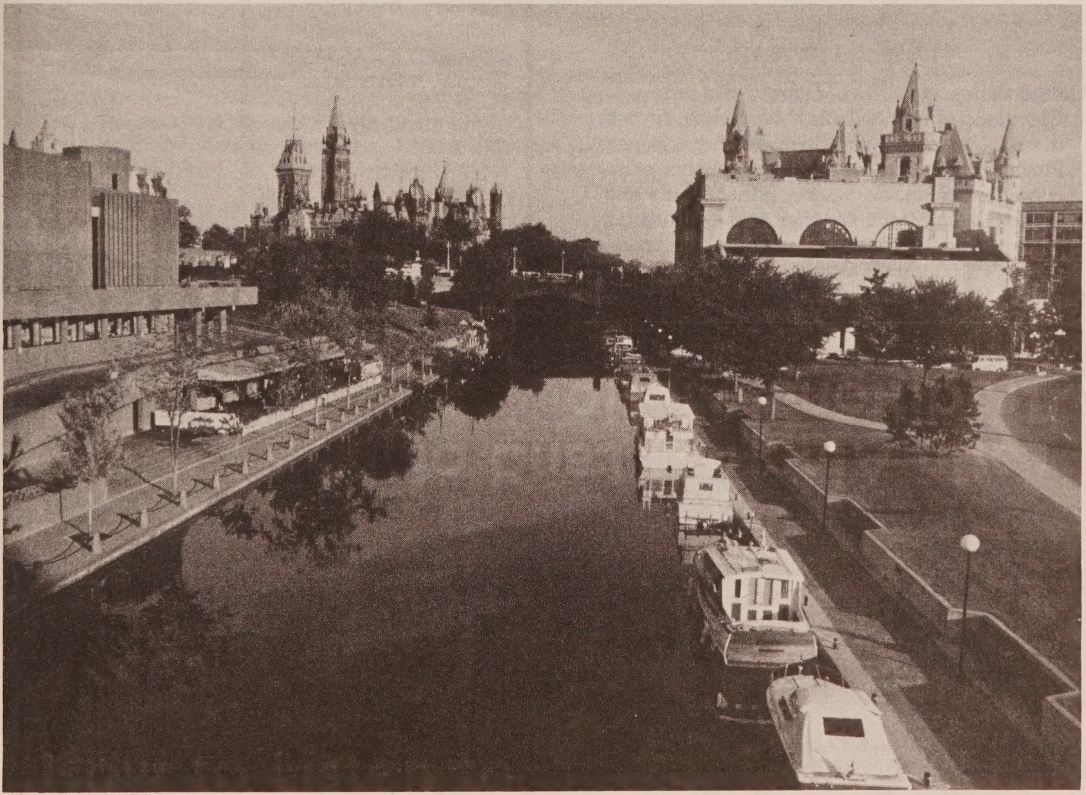
But what do you do if you're flying to New York from London and want to know the weather on the other side of the Pond? You won't have any luck with the Voice of America. It will only tell you about the political winds out of Washington.

In fact, often the best bet is not to tune in normal world band broadcasts at all. Instead, hone in on the *aeronautical weather* stations—called "VOLMET"—that share the world radio spectrum with broadcasters. These are the same English-language transmissions airline crews listen to when they're out over the ocean.

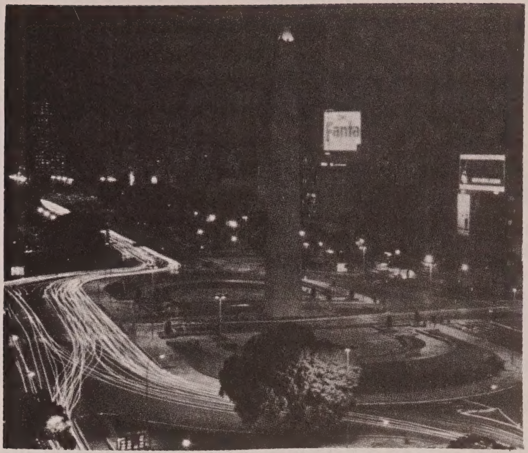
You know that these pros, hurtling along above the earth in aluminum-foil cylinders, are going to get the best data modern weather technology can provide. And now, with your world band radio, you can, too.

To receive VOLMET weather information, you only need a radio that can tune the world band spectrum continuously from at least 5-14 MHz . . . 2-14 MHz if you're really fussy. Many of these stations are audible on an ordinary world band radio, but a number use special *lower-sideband* signals that can be understood only on radios designed to cope with them. Fortunately, most larger and midsize portables—and virtually all tabletops—can receive lower-sideband signals. Even some compacts, such as the Sony ICF-2003 and ICF-PRO80, are designed to pick these up properly.

Following, extracted from the *Shortwave Directory* (Grove Enterprises), are some of the



Rideau Canal, Ottawa, Ontario



Buenos Aires's cosmopolitan Avenida 9 de Julio by night

major VOLMET stations currently on the air. Weather data for several cities is usually aired sequentially on the same channel, with the "cycle period" for any given city being thirty minutes. Once you're heard what you want, you can be assured of hearing it repeated thirty minutes later, hour-after-hour, day-after-day.

Eastern/Central North America

2905, 3485, 5592, 6604, 8870, 10051, 13270 and 13276 kHz

United States: New York, Detroit, Chicago, Cleveland, Niagara Falls, Milwaukee, Indianapolis, West Palm Beach, Tampa, Bangor, Pittsburgh, St. Louis, Syracuse, Minneapolis, Newark, Boston, Baltimore, Philadelphia and Washington. Miami weather is also heard on these channels, plus the additional channels of 2950, 5580 and 11315 kHz.
Canada: Windsor Locks and Gander.

Western/Central North America and Nearby Pacific

2863, 8828, 6679 and 13282 kHz

Continental US: Los Angeles, San Francisco, Sacremento, Las Vegas, Seattle/Tacoma, Portland and Alaska.
Pacific US: Hawaii and Guam.
Canada: Vancouver and Ontario.

Carribean

2905, 3485, 5592, 6604, 8870, 10051, 13270 and 13276 kHz

Bermuda, Nassau and Freeport.

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2998, 3413, 5640, 6580, 8957, 11378, 13264 kHz

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Near East: Tel Aviv, Haifa, Elat, Jerusalem, Larnaca, Athens, Ankara, Istanbul.

Asia and Australia

2965, 3458, 5673, 6676, 8849, 11387 and 13285 kHz

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Forecasts for the Atlantic, aired over radio station WWV in Colorado, are heard from 8-11 minutes after the hour. These are often audible in the Americas, Europe, West Africa and the Atlantic Ocean.

Forecasts for the Pacific, aired over radio station WWVH in Hawaii, are heard from 48-52 minutes after the hour. These tend to be audible in Australasia and throughout much of the Pacific Ocean region.

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Automate your cassette recorder with the CC-2020 Cassette Controller. Now operate your cassette recorder via the Timer/Alarm function on board your shortwave radio. Using the CC-2020 gives you the flexibility of automated SW cassette recordings.

How?
The CC-2020 links the Timer/Alarm on your reviever by submini plug to the remote control jack of a cassette recorder, enabling you to make cassette recordings of shortwave programs. No matter what time or frequency they may be broadcast just by setting the on board timer. Following is a list of S.W. receivers with a Timer/Alarm function that operate with the CC-2020 Cassette Controller. Sony: ICF-2010/2001D, ICF-2002/7600D, ICF-7700/7600DA, ICF-2003. Panasonic: RF-B60. Sangean: ATS-801, ATS-803.

No disassembly of receiver is necessary.
Requires a cassette recorder with a remote 2.5 mm submini jack (Fig.1), an AC adapter or equivalent transformer, and an audio patch cord between the radios' tape output jack and the cassette mic. input jack (Fig. 2).

The price is $37.50 plus $3.00 for shipping ($5.00 for overseas shipments). Includes twelve month warranty. Audio patch cords, mini plug to mini plug are available at time of order for $2.00. Payment by check in U.S. funds with U.S. bank code imprints or by money order. For customers outside of North America; payment may also be made by International Postal Money Order, in U.S. funds. Please make all payments to *"Soltronic"*.

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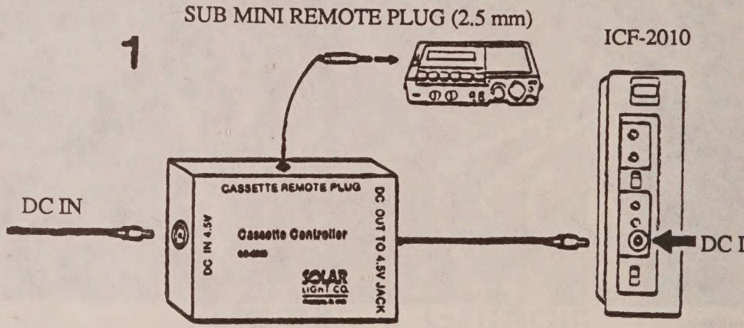

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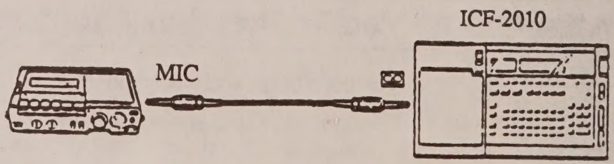

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THE JAPAN RADIO NRD-525

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"Japan Radio has taken the features shortwave listeners have always sought…and packaged the lot into what is unquestionably the best overall shortwave listener's receiver on the market today."

"The NRD-525 exemplifies once again that Japan Radio receivers are for the connoisseur."

Larry Magne, International Broadcast Services

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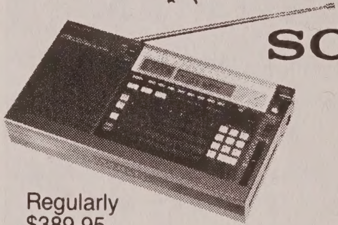

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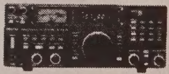

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Photo page 67: Advanced receivers are made in many countries. Japanese listener Masayuki Uchiike uses German, Japanese, and American receivers to hear the world

M.UCHIKE
SONY

1988 BUYER'S GUIDE TO WORLD BAND RADIO

HOW TO BUY A WORLD BAND RADIO

World band radios have to receive signals from afar, so it's not surprising that some better models are on the leading edge of technology. That's the good news. Less encouraging is that there is no shortage of low-technology clunkers on the market.

Specialized Tests for Evaluating Radios

That's why, starting ten years ago, International Broadcasting Services conceived and carried out the concept of specialized systematic testing of world band radios. These tests have grown over the years to involve a number of individuals, including "hands on" test panelists and specialized laboratory personnel. The reports, which have nothing to do with advertising, form the basis of our "Buyer's Guide," and even more detailed data on sophisticated world band receivers is available via *RDI White Papers*.

Taken together, these findings indicate that while really cheap world band radios serve little good purpose except for occasional use on trips, it's not necessary to spend hefty sums to obtain a really pleasant radio. Quality advanced-technology portables list from $189, and sometimes sell for less.

Best-Value Performers Start at $189

The best values are usually found among portables in the $189–280 range that are given a two-star rating in the "Buyer's Guide." These perform surprisingly well and are more than adequate for most listeners' needs. Too, they can be used both in the home and on trips, and they don't require a special antenna.

Higher-priced portables can have advantages, especially if you are a seasoned listener or inclined to go for the best. Even costlier tabletop models are available, but these are primarily for ferreting out the weakest and most obstinate stations. Tabletop models usually require a separate antenna, too.

What Do You Want to Hear?

In the final analysis, it's what you're trying to hear that should determine what you purchase. If you're interested only in the strong, clear stations, then there's no need to spend a king's ransom on equipment designed to hear a fly scratch its back on a Pacific Island. Look for a reasonably performing portable with high-quality audio.

Ratings of Overall Performance

★★★★★	Superb
★★★★	Excellent
★★★	Very Good
★★	Good
★	Fairly Good
□	Fair
◪	Fair to Poor
■	Poor

Classement Général

★★★★★	Superbe
★★★★	Excellent
★★★	Très Bon
★★	Bon
★	Assez Bon
□	Moyen
◪	Moyen à Médiocre
■	Médiocre

Clasificación General

★★★★★	Magnífico
★★★★	Sobresaliente
★★★	Muy Bueno
★★	Bueno
★	Bastante Bueno
□	Regular
◪	Regular asta Mediocre
■	Mediocre

Einteilung in Klassen

★★★★★	Ausgezeichnet
★★★★	Vorzüglich
★★★	Sehr Gut
★★	Gut
★	Ziemlich Gut
□	Nicht Sehr Gut
◪	Nicht Sehr Gut zu Schlecht
■	Schlecht

Comparative Ratings of Portable World Band Radios

Portables these days are handy, affordable and widely distributed—not to mention fun. Trouble is, there are a number of models that are so awful as to be essentially useless. For example, some credit card companies and department stores have been known to prey on newcomers by offering "multiband portables," usually for around $100–130. These sets are so terrible that their disgusted owners almost invariably turn away from world band radio, blaming the medium instead of the outfit that sold them the radio in the first place. Had they spent only another $50 or so, they could have had a world class radio.

The main rule of the road is to remember that world band portables —unlike, say, TV sets—vary considerably in performance from model-to-model. We've tested models performing anywhere from poor (■) to very good (three stars on a scale of five). Only costly tabletop models earn an "excellent"—four stars—or "superb"—five stars.

Obviously, best results among portables are found among the two top-rated models. However, high-performance bargains can be found among such two-star models as the Philips/Magnavox D2935 and the various incarnations of the redesigned Sangean ATS-803. You can get an awful lot of performance for under $200!

Travel Specialty Sets Available

Most radios tested are compact enough for travel. For those who place a premium on traveling light, the Panasonic RF-B60, followed by the Sony ICF-2003/ICF-7600D, perform nicely and come equipped with a wide range of travel-oriented features. For bikers and others who must consider weight above all else, the Sony ICF-4920/ICF-4900 Mark II, followed by the Panasonic RF-B20, are the obvious choices.

Models are listed in order of suitability for listening to world band radio broadcasts. To facilitate the comparison of prices among competing models, US list prices are given whenever possible. Thus, once adjustments are made for local commercial, currency and tariff considerations, these prices serve as an effective worldwide index.

★★★ Sony ICF-2010

★★★ Sony ICF-2001D

$389.95

Advantages: Innovative synchronous detector circuit results in superior reception in world, longwave and mediumwave AM bands. Numerous tuning features. Separately displayed 24-hour World Time (UTC) clock. Alarm/sleep/timer facilities.

Disadvantages: Audio quality slightly below par for price class. Proliferation of controls and features may intimidate or confuse some. Minimally larger and heavier than desirable for airline travel.

Overall: The best. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★★ Grundig Satellit 650

$1,149.00

Advantages: Above-average performance in all bands. Numerous helpful tuning features. Unusually pleasant audio quality. 24-hour World Time (UTC) clock. Alarm/timer facilities. Superior FM reception.

Disadvantages: Rather large and heavy for portable use. Relatively costly. Motorized preselector tuning creates unnecessary complexity.

Overall: A favorite for hour-after-hour listening, the '650 is arguably the best-sounding world band radio available new. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★ Philips D2999

★★ Magnavox D2999

$399.00

Advantages: Unusually pleasant audio quality. Numerous helpful tuning features. Performance above average in most bands. 24-hour World Time (UTC) clock. Alarm facility.
Disadvantages: Somewhat large and heavy for air travel.
Overall: A fine-sounding world band receiver for the price. A complete test report on the Philips/Magnavox D2999 may be found in last year's edition of this book.

★★ Grundig Satellit 400

$449.00

Advantages: Pleasant audio quality. Numerous helpful tuning features. World band performance at least average. 24-hour World Time (UTC) clock. Alarm facility. Superior FM reception. Unusually handy carrying handle.
Disadvantages: Unstable synthesizer produces a "whooshing" sound in some world radio bands. Slightly larger and heavier than desirable for airline travel.
Overall: A pleasant all-around receiver. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★ Philips D2935

★★ Magnavox D2935

$249.99

Advantages: Pleasant audio quality. Numerous helpful tuning features. Performance good in most bands.
Disadvantages: Pushbuttons lack "feel." Slightly larger and heavier than desirable for airline travel.
Overall: A simplified and more compact version of the Philips/Magnavox D2999, the D2935 is an exceptional value. Reviewed in more detail elsewhere in this "Buyer's Guide."

D-2999, sold by Philips and Magnavox alike, is larger and heavier than the cheaper D-2935

★★ Panasonic RF-B60

$279.95

Advantages: Very easy-to-operate state-of-the-art radio. Light and compact for travel. Pleasant audio quality. Numerous helpful tuning features. 24-hour World Time (UTC) clock. Alarm/sleep facilities. Two-year warranty.
Disadvantages: Tuning knob cumbersome to turn rapidly.
Overall: A very nice all-around portable for listening to favorite programs. Reviewed in more detail elsewhere in this "Buyer's Guide."

Panasonic RF-3100 is one of Panasonic's early synthesized designs

★★ Sony ICF-2003

★★ Sony ICF-7600DS

$269.95

Advantages: Light and compact for travel. Numerous helpful tuning features. Separately displayed 24-hour World Time (UTC) clock. Alarm/sleep facilities.
Disadvantages: Only modest sensitivity with built-in antenna. Pedestrian audio quality. Lacks tuning knob.
Overall: A high-quality portable for air travel. ReReviewed in more detail elsewhere in this "Buyer's Guide."

★★ Panasonic RF-3100

★★ National DR-31

$499.95

Advantages: Fairly pleasant audio quality. Two-year warranty.
Disadvantages: Overall performance slightly below average for price class. High battery consumption. Somewhat large and heavy for air travel.
Overall: A pleasant, but not distinguished, performer.

★★ Sangean ATS-803

★★ EEB 2020

★★ Realistic DX-440

★★ Eskab RX33

$189.00–199.95

Advantages: Numerous helpful tuning features. Performance slightly above average.
Disadvantages: None.
Overall: An unusually worthy value. Reviewed in more detail elsewhere in this "Buyer's Guide."

REALISTIC
852
DX-440
VOICE OF THE WORLD

Radio Shack's new DX-440 "Voice of the World" portable

★★ Sony ICF-PRO80

★★ Sony ICF-PRO70

$419.95

Advantages: Comes equipped with versatile VHF scanner. Fairly light and compact for travel. Good at bringing in weak world band stations.
Disadvantages: Cumbersome to operate. Mediocre audio quality. Lacks tuning knob and most travel features.
Overall: Of interest mainly to "DXer's" in need of something smaller than an ICF-2010, plus VHF scanner listeners who also tune in world band broadcasts. Reviewed in more detail elsewhere in this "Buyer's Guide."

★ Sony ICF-7700

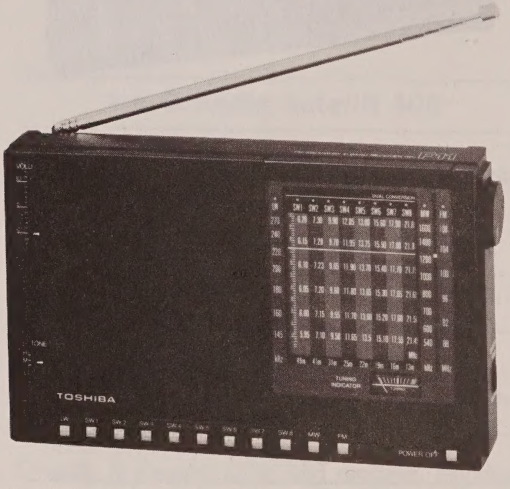
★ Sony ICF7600DA

$269.95

Advantages: Very easy to use. Light and compact for travel. 24-hour World Time (UTC) clock. Alarm/sleep functions.

Disadvantages: Coarse tuning increments create performance shortcomings. Limited coverage of world band spectrum.

Overall: For the technically timid. Reviewed in more detail elsewhere in this "Buyer's Guide."



Toshiba's RP-F11 is one of the few compact portables with an analog signal strength meter

★ Sony ICF-4920

★ Sony ICF-4900 Mark II

$99.95

Advantages: Exceptionally light and compact for worldwide air travel.

Disadvantages: Limited coverage of world band spectrum. Lacks digital tuning display. Mediocre audio quality.

Overall: The best of the minis, the '4920—new for 1988—is nonetheless of interest almost exclusively to the weight-conscious traveler.

☐ Panasonic RF-B20

$109.95

Advantages: Very light and compact for worldwide air travel. Unusually good audio for such a small radio.

Disadvantages: Limited coverage of world band spectrum. Mediocre ability to reject adjacent-channel interference. Lacks digital tuning display.

Overall: Would be the top mini were it able to sort stations out more successfully.

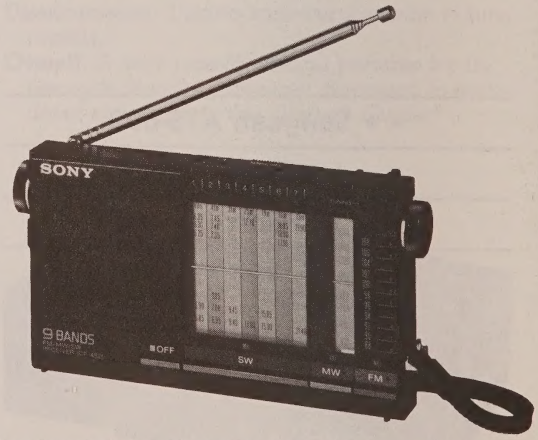
☐ Toshiba RP-F11

$129.95

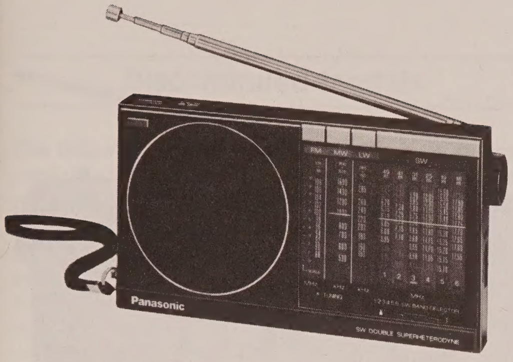
Advantages: Light and compact for travel.

Disadvantages: Limited coverage of world band spectrum. Lacks digital tuning display. Modest overall performance.

Overall: Reasonable performer for the price.



Sony introduced the ICF-4920 for 1988

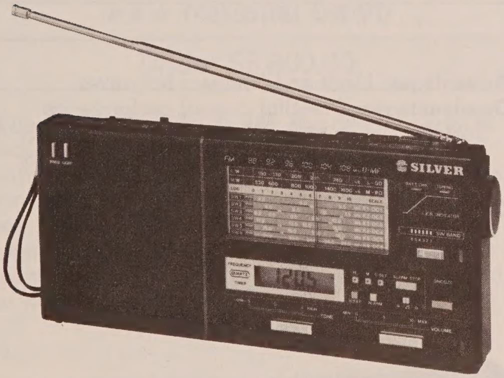


Panasonic's miniature RF-B20 travel portable

☐ Silver XF1900

About $150.00 (Europe only)

Advantages: Fairly pleasant audio quality. 24-hour World Time (UTC) clock. Sleep/timer functions.
Disadvantages: Mediocre overall performance. Does not receive 120, 90 and 75 meter world bands.
Overall: An out-of-date design, but interesting because of its moderate price.



Silver XF-1900 provides only fair performance

☐ Grundig Yacht Boy 700

About $250.00 (Europe only)

Advantages: Light and compact for travel. Inexpensive.
Disadvantages: Substandard overall performance. Limited coverage of world band spectrum. Lacks digital tuning display.
Overall: A low-priced, modest performer.

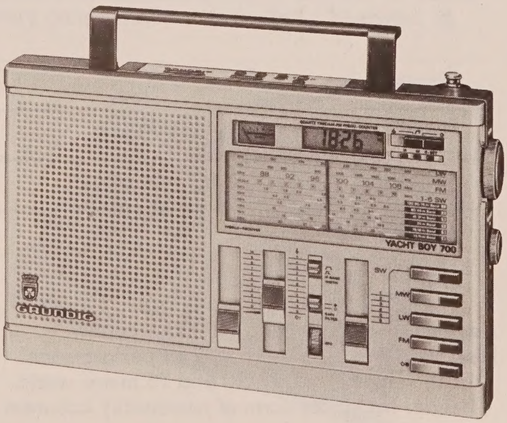
Model D-1835 compact portable is sold under both Philips and Magnavox names

◪ Philips D1835

◪ Magnavox D1835

$69.99

Advantages: 24-hour World Time (UTC) clock. Sleep/timer functions.
Disadvantages: Mediocre overall performance.
Overall: Better choices are available near this price range.



Grundig's Yacht Boy series performs far less well than its Satellit models

◪ Sangean SG-789

◪ EEB 4950

◪ Emerson PSW4010

$69.95

Advantages: Exceptionally light and compact for worldwide air travel. Inexpensive.

Disadvantages: Mediocre overall performance. Somewhat limited coverage of world band spectrum. Lacks digital tuning display. Mediocre audio quality.

Overall: A low-priced, modest mini portable of interest almost exclusively to the weight- and price-conscious traveler.

STEREO
QUARTZ
LIGHT
LOCK
OFF ON
STEREO
BATTERY
TUNING
DOWN UP
STORE
CLEAR
SLEEP
SCAN
MANUAL AUTO
M 1
M 2
M 3
M 4
M 5
POWER
BAND
FUNCTION
OFF AUTO ON
LW MW SW FM
MODE
MONO STEREO
TONE
LOW HIGH
SANGEAN
ATS-801

Sangean ATS-801

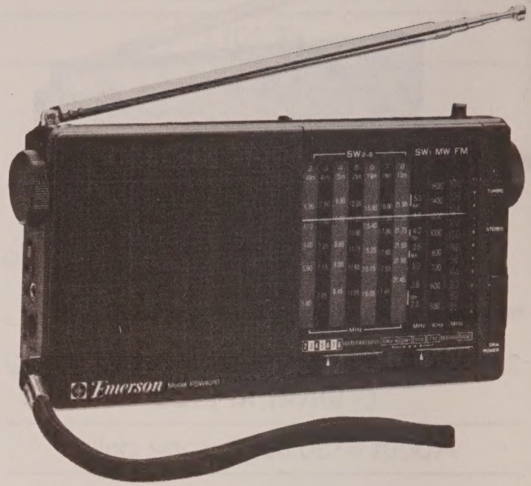
■ Realistic DX-360

$99.95

Advantages: Fairly pleasant audio quality.

Disadvantages: Mediocre overall performance. Does not receive 120, 90 and 75 meter world bands. Lacks any form of reasonably accurate tuning display.

Overall: Barely acceptable. Aficionados of Radio Shack products should look, instead, to the new DX-440.


SW2-8
SW1 MW FM
MHz
Emerson Model PSW4010

Sangean's SG-789 is sold under various names, including Emerson

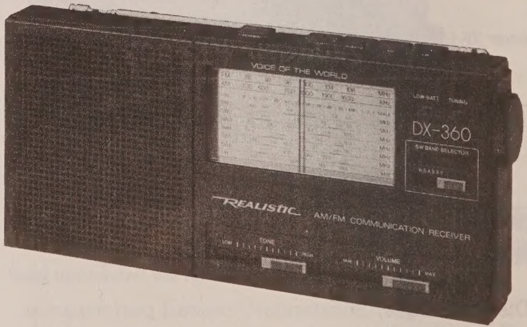
■ Sangean ATS-801

$99.00

Advantages: Light and compact for travel.

Disadvantages: Dreadful overall performance. Tortoise-slow tuning. Limited coverage of world band spectrum. High battery consumption for compact radio.

Overall: A model with little to commend it.


VOICE OF THE WORLD
LOW BATT
TUNING
DX-360
SW BAND SELECTOR
REALISTIC
AM/FM COMMUNICATION RECEIVER
TONE
VOLUME

Realistic DX-360 is stripped-down version of Silver XF-1900

Discontinued Models

The following models have reportedly been discontinued, but may still be available new at some retail outlets. Prices are in the range of actual or estimated sale prices as of the time this book went to press. Because these are discontinued models, prices vary widely and interesting bargains can sometimes be struck with retailers seeking to unload outdated inventory.

★★★★ Sony CRF-1

About $1,000.00

The CRF-1 is a moderately large semi-professional communications receiver suited to field portable applications. Nearly every aspect of performance is top-drawer—dynamic range, selectivity, sensitivity, image rejection . . . the works. Only the "wide" bandwidth and audio quality disappoint, plus tuning features are limited.

★★★ Panasonic RF-9000

★★★ National DR-90

Under $3,800.00

With excellent audio quality and overall performance in all bands, plus numerous helpful tuning features, this one-time pride of Panasonic's fleet is nonetheless much too large and heavy for portable use. Grossly overpriced when in Panasonic's line, it may be available new here and there at steep discounts. If you can find it for under $1,000, it could be worth considering.

★★★ Grundig Satellit 600

Under $800.00

Nearly identical to Grundig Satellit 650.

★★ Sony ICF-2002

★★ Sony ICF-7600D

Under $250.00

Essentially identical to Sony ICF-2003.

★★ Panasonic RF-2900

★★ National DR-29

About $175.00

Very similar to the General Electric World Monitor II. Especially interesting is a high-performance version sold in the United Kingdom some years back. For more details, see the description of the GE World Monitor, below.

★★ General Electric World Monitor

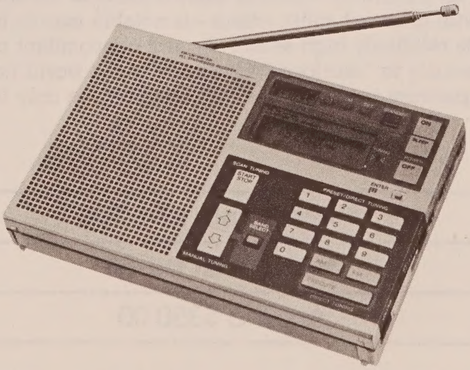
Under $235.00 (US only)

This model has modest frequency stability and a tendency to produce unwanted signals 6 MHz down. For air travel, the World Monitor is larger and heavier than many other portables. Lacks some of the snazzier "bells and whistles" found on a number of newer models. However, in most other respects—notably audio quality—it produces results on a par with some more costly world band receivers.

★★ Sony ICF-2001

Around $170.00

The '2001 is unselective, letting in interference from adjacent stations, and its keypad is prone to failure. Battery consumption is excessive. Otherwise, in



Sony's established ICF-2002 has been replaced for 1988 by the ICF-2003

most respects it's like the smaller and lighter ICF-2003/ICF-7600DS, except that the '2003 is a bit less sensitive and much more selective.

★★ Panasonic RF-2200

★★ National DR-22

Under $180.00

Overall, performance is only slightly inferior to that of the General Electric World Monitor, above, to which the '2200/'22 adds something unique: a fully rotatable mediumwave AM antenna. The rub is that in lieu of a straightforward digital frequency readout, the '2200/'22 utilizes a Rube Goldberg arrangement to tune in stations. For most listeners, this complexity is too much to bear.

★ Supertech SR-16H

Around $125.00 (Europe only)

The Supertech SR-16—an early and unselective version of the Sangean ATS-803—is a low-cost buy for world band listening in Europe. For more details, refer to the test report, "Affordable Portable II," on the early ATS-803 in last year's edition of this book.

★ Sharp FV-610GB

Under $170.00

The FV-610GB—sold in various parts of the world with different suffix letters—is notable mainly for its relatively high sensitivity and concomitant propensity to "overload." Coverage of the world band spectrum is incomplete and selectivity is only fair.

★ Panasonic RF-6300

★ National DR-63

Around $350.00

The '6300/'63 has pleasant audio for listening to world band and local broadcasts alike. Includes twelve "memory" buttons for storing favorite stations. Selectivity mediocre. In fact, neither its sensitivity nor dynamic range is appropriate to a set in this price class.

★ Panasonic RF-B50

★ National DR-B50

About $150.00

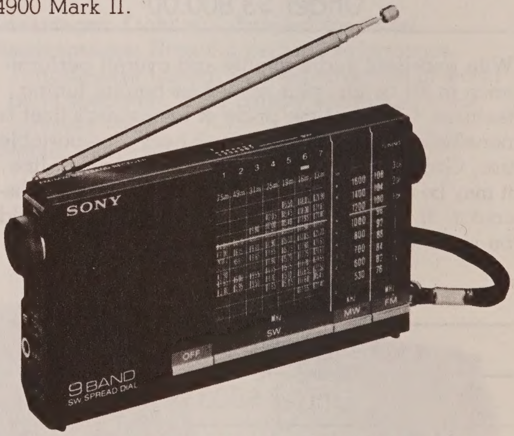
The Panasonic RF-B50 has two bandwidths and above average audio quality for a compact portable. The overall FM and mediumwave AM performance are also good for such a small set. The 'B50 covers most, but not all, of the world radio spectrum. It utilizes an analog, rather than digital, frequency readout. It's also not very sensitive to weak signals.

★ Sony ICF-4910

★ Sony ICF-4900

Under $100.00

Identical in all but styling to Sony ICF-4920/ICF-4900 Mark II.



Sony's mini-portable ICF-4910 has been replaced for 1988 by the ICF-4920

☐ Kenwood R-11

☐ Trio R-11

Under $125.00

Virtually identical to the Toshiba RP-F11.

☐ Sony ICF-7600A

☐ Sony ICF-7600AW

About $150.00

Very similar to the Sony ICF-7700/ICF-7600DA in size, shape and performance, the '7600A covers most, but not all, of the world radio spectrum with an analog frequency readout. Overall performance, except for the frequency readout, resembles that of the newer '7700.

☐ Grundig Satellit 300

Under $250.00 (Europe only)

The Grundig Satellit 300 is longer on features than on performance. World band performance is uninspiring in nearly every respect, with its major shortcoming being insensitivity to weak signals.

☐ Sharp FV-310GB

Under $140.00

Identical to the Sharp FV-610GB, above, except that it lacks digital frequency readout, clock/timer and stereo FM.

☐ Grundig Yacht Boy 650

Under $200.00

The Grundig Yacht Boy 650 covers most, but not all, of the world radio spectrum used for broadcasting. Frequency readout is both analog and digital, with the latter sharing the display with a 24-hour World Time (UTC) clock/timer. Audio quality is above average in quality and strength, and FM performance is similarly commendable. However, world band radio performance is only so-so, overall.

☐ Panasonic RF-799

Under $300.00

The '799 incorporates features in profusion. However, it doesn't cover the entire world radio spectrum. Overall performance is mediocre, especially for a set in this price class.

■ Panasonic RF-9

■ Panasonic RF-9L

■ National Micro 00

Under $100.00

This miniature radio, similar in appearance to Sony's respectable ICF-4920/ICF-4900 Mark II, has only size working in its favor. Unselective, with false signals aplenty—plus incomplete coverage of the world radio spectrum and tinny audio—the RF-9 is more a toy than a serious radio.

WHY YOU SHOULD—OR SHOULD NOT— BUY A TABLETOP RECEIVER

Most of us who have discovered world band radio are delighted with what we hear on our portables. But if you want to have a greater chance of unearthing the fleapowered local stations that proliferate in the lower "tropical" radio bands—60, 90 and 120 meters—you may wish to consider a tabletop receiver. These elite models aren't cheap, plus they require a good outboard antenna and electrically quiet location to strut their stuff. But when all the pieces fall into place, these supersets can really perform.

Hearing What the Home Folks Hear

For most listeners, the point of spending a lot of money on a world band radio is to eavesdrop on what the home folks are hearing. In the exotic countries to the south, world band is often used instead of FM or mediumwave AM for local radio broadcasts. These domestic broadcasts aren't intended to be heard outside the home turf. But at night in the winter they are, anyway, thanks to world band radio's exceptional ability to propagate signals around the globe.

Local Signals Often Heard Far Away

The rub is that these stations are intended for local audiences. This means that they're usually far less powerful than the international giants that come in so nicely on $250 portables. You need a highly sensitive set to flush these low-powered signals out. And, because there are so many stations on the air, you need a set that is unusually selective to lasso any given one of these little radio heifers from the thundering herd.

Sets that are unusually well-equipped to pick up these sorts of signals qualify as "DX receivers," DX being an old telegraph term to indicate great distance. Technically, almost all world band radio signals come from far away, so the term "DX" has evolved to mean weak signals—not just any signals—from afar.

That's not all. The world radio bands used for these local tropical broadcasts in equatotorial countries are also used for other and specialized types of transmissions in countries to the north. Some of these make "dih-dah" sounds which can be eliminated only by special circuitry within a radio.

It's a different radio world within the tropical broadcasting bands. If you listen to Albania's external services, targeted to foreigners, in the higher world radio bands, you'll hear lectures on Marxism-Leninism-Stalinism that only a commissar could love. But if you listen to Albania's home service in the tropical bands, you'll hear a stream of haunting Balkan music. Radio Australia beamed to the world outside Australia will tell you what officialdom wants foreigners to hear. But if you listen to the local ABC outlet in Perth, you'll be treated to such tidbits as shark alerts at the beaches.

Not all countries broadcast both external and domestic services via world band radio. Some, particularly in Latin America, broadcast domestic services only. There's no other way to hear these countries.

Either you like this kind of eavesdropping or you don't. If you do, you'll need the right equipment if you want to hear them as well and as often as possible. This is where high-quality tabletop receivers—at least those with good audio quality—and outboard antennas come into the picture.

Local Broadcasts Often Beamed Abroad

Fortunately, it's not necessary to purchase a costly tabletop receiver to hear a good number of the exotic domestic stations operating within the world radio bands. In many cases local broadcasts within these bands are targeted abroad, rather than to the home audience. Usually these are via powerful transmitters and are intended to be heard by expatriates, mariners and diplomats abroad. But, with a good radio, anybody can listen.

These dozens of outlets include "Radio Luxembourg" in English, French and German; Iran's "Familiar Voice" in Farsi; Israel's "Reshet Bet" in Hebrew and "Reshet Aleph" in English, French and others; Turkey's "TRT"; Sweden's "Sveriges Riksradio" (also in upper sideband); and numerous transmissions from the Arab World. Some of the most interesting music on the airwaves is heard on these stations, so language is not a make-or-break consideration. And nearly all are easier to hear than signals intended strictly for domestic consumption.

Comparative Ratings of Tabletop World Band Receivers

Results with state-of-the-art portables can be truly satisfying. But for some, satisfying isn't good enough. They seek the best the marketplace has to offer, and so turn to tabletop world band receivers.

What Tabletops Will and Won't Do

The best tabletop models will always outperform the best portables—but only if you're trying to hear the really weak and difficult signals. It's something like a Ferrari, which can outrun the pack on a winding mountain road but does no better than a Toyota van on a crowded freeway. Tabletop sets also tend to be better made and easier to repair than portables.

Although there are exceptions, performance among tabletops tends to rise with price, so good models aren't cheap. Additionally, tabletop models usually aren't self-contained. This means you have to go through the rigmarole of setting up an outboard antenna.

Another point is that audio quality is only fair with some models. If you're fond of listening to music over powerful world band radio stations, those models can be a poorer choice than some of the better portables. Fortunately, there are some tabletop models that sound quite good, even if none quite equals the aural quality of the Grundig Satellit 650 portable.

Because they are targeted to an elite of world band radio listeners, tabletops tend to be harder to find than portables. But the good news is that many of the electronics specialty firms that carry them also provide advice and service after the sale.

The bottom line is that we have found only four tabletop models—all costly—that clearly outperform the best of the available portables. If you're a dedicated world band listener, one of these high-quality tabletops may be ideal. But if you're a relative newcomer to the medium, or are looking for your first set, stick to the portables. If you decide later on to get a tabletop receiver, you can always use the portable for trips and listening on the balcony or backyard.

How They Perform

Among the three tabletops—two from Japan Radio, one from Kenwood—given our top five-star rating, differences in performance are relatively minor. However, differences in price can be considerable. Any of these three top sets should be a delight to own, with the only disappointment being the collective absence of fidelity-enhancing synchronous detection.

Those who are interested mainly in tuning in weak, hard-to-hear signals may also wish to consider the ICOM IC-R71. Note, though, that this otherwise-outstanding model suffers from audio that some find tiring to hear hour-after-hour.

If these models are too pricey for you, the Yaesu FRG-8800 or Lowe HF-125 may be appealing. Although neither is a star performer, both provide reception quality that is quite pleasing.

Receivers are listed in descending order of suitability as devices for listening to world band broadcasts. Keep in mind that if you listen more to weaker stations—or speech, such as newscasts—audio quality will be of less importance than if you listen mainly to musical programs over strong, clear stations.

★★★★★ Japan Radio NRD-93

$7995.00

Advantages: Superb reception of all types of world band signals. Exceptional durability and quality of construction. Unusually easy to repair. Excellent ergonomics. Above-average audio for a tabletop model. Sophisticated optional scanner allows for a certain degree of automated listening.

Disadvantages: Dreadfully expensive! Lacks certain advanced-technology controls.

Overall: A sterling professional-quality receiver for those to whom money is no object. Nonetheless, performance is not appreciably different from that of less-costly models, such as the Kenwood R-5000 and Japan Radio NRD-525.

Japan Radio NRD-93 with NDH-93 "intelligent" scanner, for when money is no object

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★★★★★ Kenwood R-5000 (except UK)

★★★★★ Trio R-5000 (UK only)

$899.00

Advantages: Superb reception of all types of world band signals. Unusually good audio for a tabletop, provided a suitable outboard speaker is used.

Exceptionally flexible operating controls.

Disadvantages: Ergonomics only fair. Replacement of standard, but mediocre, wide bandwidth filter with high-quality substitute adds $70 to cost.

Overall: Superb performance at a non-stratoshperic price. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★★★★ Japan Radio NRD-525

$1,285.00

Advantages: Superb reception of all types of world band signals. Highly flexible operating controls. Very good ergonomics. Quality of construction slightly above average. Modular plug-in circuit boards enhance ease of repair. Sophisticated scanner allows for a certain degree of automated listening.

Disadvantages: Audio quality only fair. Surface-mounted devices make replacement of discrete components very difficult.

Overall: A superb performer that's well put together. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★★★ ICOM IC-R71

$949.00

Advantages: Superb reception of weak, hard-to-hear signals. Highly flexible operating controls.

Disadvantages: Mediocre audio quality. Substandard ergonomics. Operating system software erases, requiring reprogramming by ICOM service center, if backup battery dies.

Overall: A DXer's treat, but not equal to most comcompeting models for quality-audio program listening. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★★ Yaesu FRG-8800

$699.95

Advantages: Flexible operating controls. Audio quality slightly above average for tabletop model. Fairly good ergonomics. 24-hour World Time (UTC) clock.

Disadvantages: Bandwidths too broad as compared to most other tabletop models. Reportedly above-average rate of microprocessor failure, usually user-correctable.

Overall: A well-balanced performer. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★★ Lowe HF-125

£375 in UK

$599.95

Advantages: Unusually straightforward to operate for tabletop model. Generous bandwidth flexibility. Most physically rugged receiver tested, except for Japan Radio NRD-93. Very good audio for tabletop model. Optional battery pack allows for field portable use.

Disadvantages: Some operating controls provide limited flexibility. Reception of world band signals suffers from slight insensitivity to weak signals, digital-circuit "whine" and excessively slow automatic-gain control recovery.

Overall: A pleasant, tough, easy-to-operate little unit. Note that circuit improvements may be forthcoming in later production units. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★ Ten-Tec RX325

$699.00

Advantages: Fairly straightforward to operate for tabletop model. Physically rugged. 24-hour World Time (UTC) clock.

Disadvantages: Overall performance somewhat below par.

Overall: A decent performer. Reviewed in more detail elsewhere in this "Buyer's Guide."

★★ Kenwood R-2000 (except UK)

★★ Trio R-2000 (UK only)

$649.95

Advantages: Straightforward to operate, with good ergonomics. Audio quality slightly above average for tabletop model. 24-hour World Time (UTC) clock.

Disadvantages: Overall performance materially hampered by "overloading." Bandwidths too broad as compared to other tabletop models.

Overall: Generally pleasurable for listening to most world radio programs, but not much more. Aficionados of Kenwood products should look, instead, to the '2000's superb new sibling: the R-5000.

15.260.0
KENWOOD
R-2000
COMMUNICATIONS RECEIVER

Kenwood's lowest-priced receiver, the R-2000

MILLIVOLTMETER MV5A
MULTIMETER MV 5A
GRUNDIG

Grundig radio being adjusted at Portuguese factory

☐ Heathkit SW-7800

$349.95

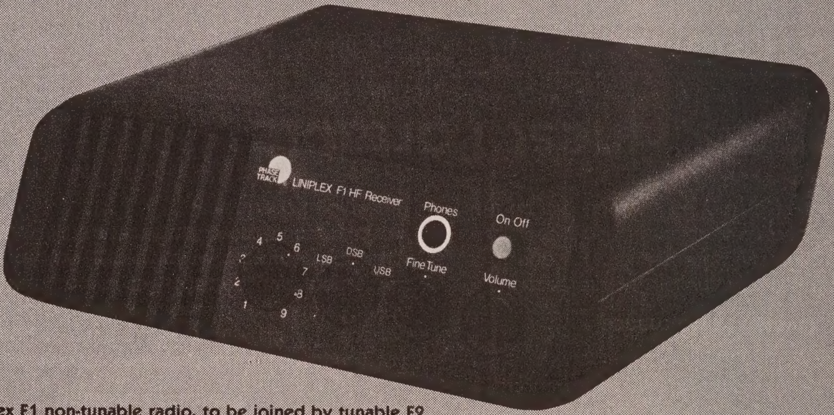
Advantages: Lowest-priced tabletop model tested.

Disadvantages: Poorest performance of any tabletop tested. Available only in kit form, requiring dozens of hours to construct.

Overall: With the marriage of such names as "Heathkit" and "Zenith"—now the parent company of Heathkit—you'd think the SW-7800 would be a world-class receiver. It isn't. Unless kits are your special passion, you'd be better off spending the same money on a much-superior Sony ICF-2010 or ICF-2001D portable.

Heath, now part of Zenith, offers the only world band radio available in kit form

KILOBUCK RADIO CAN'T BE TUNED



Liniplex F1 non-tunable radio, to be joined by tunable F2 in 1988

. . . But Help Is on the Way

You assume that when you take a radio home, you'll be able to sit down and tune it to whatever channel you want. But with the circa $1,000 Liniplex F1 this isn't so. You get nine factory-preset channels, and no more. If you want to change any, you're out of luck unless you buy some parts from the manufacturer in Reading, England.

This makes the Liniplex F1 about as popular with the public as castor oil. Nevertheless, tuning aside, the F1 performs quite well, even though it has only one bandwidth and a tiny speaker. Its high point is a synchronous detector—the same type of high-tech circuit that makes the Sony ICF-2010/ICF-2001D so special. It performs flawlessly, even better than that of the '2010.

All of this hasn't escaped the attention of the F1's manufacturer, Phase Track. It's announced that it will shortly be unveiling a model, the F2, which—*mirabile dictu*—can be equipped to be tuned. The new F2, due out sometime in 1988, will be based on the F1 and will include an analog signal-strength indicator. Add to this the synchronous detection feature of the F1 and this should be a radio of exceptional interest to serious world band listeners.

Discontinued Models

A number of discontinued models are still available new on dealer shelves. However, unlike discontinued portables, discontinued tabletop models are rarely heavily discounted. Indeed, in the case of some prized models prices may be higher than they were when the sets were still in the manufacturer's catalog.

Here's a glance at some of the more recently discontinued models you might come across in your wanderings through electronics stores and catalogs. Prices are estimated or recent actual *selling* prices for new units.

★★★★★ Japan Radio NRD-515

Under $1,500.00

The Japan Radio NRD-515 is built like a fortress and provides intelligible signal reception under all but the most excruciating situations. Operation is straightforward and pleasant, but the '515's woolly audio is not well-suited to the reproduction of music.

★★★ Sony ICF-6800W

Under $600.00

Lacking the "bells and whistles" found on most other tabletop models, the Sony ICF-6800W provides unusually well-rounded and pleasant results, along with uncomplicated operation. In particular, its audio quality is well above average. Another unusual plus with the '6800 is that it operates off either ac power or batteries. Its chief shortcoming lies in its modest dynamic range, which can result in "overloading," with stations sounding as though they're piled atop each other when they really aren't.

★★★ McKay Dymek DR 101-6

Under $1,000.00

The best of the McKay Dymek line, the DR 101-6 manages to incorporate McKay's innovative ideas, such as a variable-rate slewing knob, without some of the drawbacks evidenced on earlier versions of the DR 22 and DR 33 series. As with other models in the McKay line, the DR 101-6 comes equipped with a substandard speaker and mediocre front-end selectivity. But with a worthy external speaker the end result can be quite pleasant.

★★★ Yaesu FRG-7700

About $550.00

Similar in performance to the newer FRG-8800, but lacking many of the '8800's "bells and whistles," the '7700—which has three bandwidths, instead of the '8800's two—can be an attractive alternative when it is priced to move.

★★ Kenwood R-1000

★★ Trio R-1000

Under $500.00

The first of Kenwood's modern world radios to come on the market, the R-1000 was an early favorite among radio aficionados and electronics experimenters. Although the current Kenwood R-2000 is in many ways a more modern receiver than the older R-1000, the '1000 is less prone to "overloading," and thus continues to be preferred where long antennas are used.

★★ McKay Dymek DR 33-C

Under $1,000.00

Some years back, McKay Dymek decided to produce world band radio receivers that would look like and interface with conventional stereo hi-fi components. The earliest models, the DR 22 and DR 33 series, were not entirely successful performers. A small quantity of the final version of the DR 33-C— the DR 33-C/6—may still be on hand, new, at Stoner Communications' warehouse.

★ Bearçat DX1000

Under $600.00

When Bearcat, long known as a pioneer in the manufacture of scanning devices, announced its first world band receiver, it was expected that something advanced and quite special would emerge. Instead, what appeared was a thoroughly servicable, but uninspiring, radio seemingly designed to be produced at rock-bottom cost. Given the several better alternatives, there is precious little reason to select this model.

★ Kenwood R-600

★ Trio R-600

About $400.00

Kenwood's low-cost receiver, the R-600, provides decent, uncomplicated world radio reception with a minimum of operating controls and features. Introduced on the market long after the appearance of the R-1000, and just as advanced-technology portables were presenting serious competition, the R-600 was too little, too late.

★ Panasonic RF-4900

★ National DR-49

Under $500.00

An otherwise-modest performer with surprisingly pleasant audio quality, the Panasonic RF-4900 is notable because it operates off both ac power and batteries.

The Perfect Starter Radio

SANGEAN ATS-803

EEB 2020

REALISTIC DX-440

ESKAB RX33

All the best portable world band radios come from Japan. Well, that's how it used to be. Today, it's simply not true.

Japanese domination of the field is declining rapidly. The upward spiral of the yen has sent prices through the roof and confusion over trade restrictions in some countries has cast a shadow over the market. Too, in some parts of the world, distribution channels for such in-demand models as the Sony ICF-2010 have fallen into disarray, making it difficult for some dealers to obtain receivers for their customers.

As a result, many people have been turning to other countries for their world band radios. Fortunately, there appears to be no shortage of places willing to jump into this growing void. Chief among these is Taiwan.

The hub of activity in this country is centered on a company known as Sangean Electronics, Inc. Until recently, Sangean (pronounced "san-GEE-uhn") was hardly a household name, best known only in that shadowy subculture of department stores buyers and the like. All over the world, thousands of Sangeans masqueraded as Supertech SH-16H's and goodness only knows what else.

Special Versions Found Worldwide

Today, the Sangean line is in the process of stepping out of the closet, and with good results. The pride of the fleet, the ATS-803, is often called the "poor man's '2010"—a reference to the $300+ price tag on the Sony ICF-2010. The radio has a lot going for it, most notably the fact that it retails for under $200.

Still, to be an affordable portable, a radio's got to be worth its price. And the ATS-803 basically is. In addition to its affordability, it boasts a keypad for easy frequency selection, as well as the traditional knob. A digital display shows where you are tuned, and good stability prevents the radio from drifting away from that spot on the dial. There's also a modest assortment of gadgets, like memory buttons for storing your favorite stations, and so forth. The radio even looks roughly like the '2010.

Early models of the '803 weren't without their drawbacks, however. Most appalling was the lack of selectivity. The filter was so wide that when you tuned in one frequency, you'd hear a number of others at the same time. So while you might be trying to listen to the BBC by tuning in 6175 kHz, you'd also hear Radio Interference on nearby 6170 and its sister station, Radio Whino, on 6180 kHz. Add to that a package of lesser annoyances, and you had a radio that was worth the price—but only vis-à-vis the competition.

Enter Dick Robinson of the Electronic Equipment Bank. Robinson, a Sangean dealer, noted that, with a very simple modification, he could correct the ATS-803's most annoying problem, the lack of selectivity. Pleased with the results, he ordered a number of the radios, with modification, made for his own company, which he now sells under the name "EEB 2020."

But the people at Sangean are no fools. And herein lies the greatest promise the radio has for world band listeners: evolution. Every time someone—à la Robinson—tells the people at Sangean about a way to improve their radios, they incorporate the design changes into the Sangean line. As a result, the '803 has become a constantly improving radio.

Numerous Features Add to Versatility

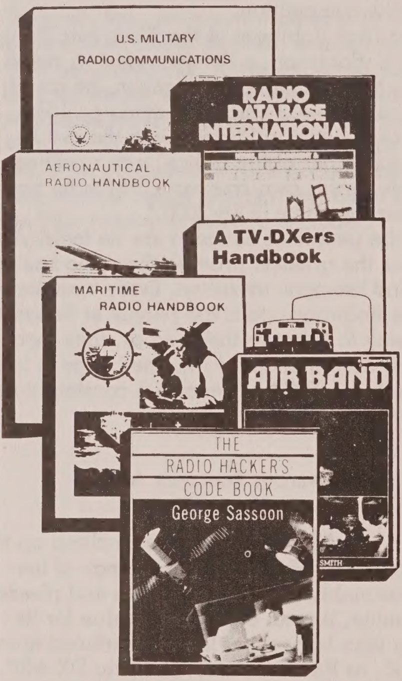
This year, the ATS-803 continues its climb up the evolutionary ladder. With a wide range of features, reasonably good performance and pleasant audio quality, it is an even better value for its price tag than last year's. It's also surfaced anew, at $199.95, as Radio Shack's "Realistic DX-440", and continues to be sold as the EEB 2020 and the Eskab RX33. All these are essentially identical to the '803 with Sangean's label.

In order to correct the earlier selectivity problem, the 1988 version has two selectivity positions: full fidelity, or "wide," for stations in the clear; and "narrow" for stations hemmed in by interference. In this respect, it's now unusually flexible for an affordable portable. A number of other changes—improved sensitivity and dynamic range, for example—have also been made for 1988, as has the elimination of a strange "thooping" sound that used to appear as the radio was being tuned.

The '803 remains a highly stable receiver, making retuning unnecessary. Sensitivity with the built-in telescopic antenna is quite good, too. This allows the set to bring in a variety of both weak and strong stations without having to be hooked up to an outdoor antenna. And it works well in just about any part of the world, covering mediumwave AM, FM stereo, plus the entire world band radio spectrum.

The '803 is fully portable and self-contained, being well-suited for both travel and in-home use. It's powered not only by batteries, but also by a dual-voltage ac converter that works in most countries. There's also a digital readout so you can tell immediately what channel you're tuned to, plus an LED signal-strength indicator. A dial light, separate bass and treble tone controls, sleep-delay timer, clock-alarm/timer, and power lock—to keep the set from accidentally switching on while stuffed in a suitcase—round out the '803's list of features. In all, it's a fine showing and well worth consideration.

WANT TO TUNE INTO MORE STATIONS?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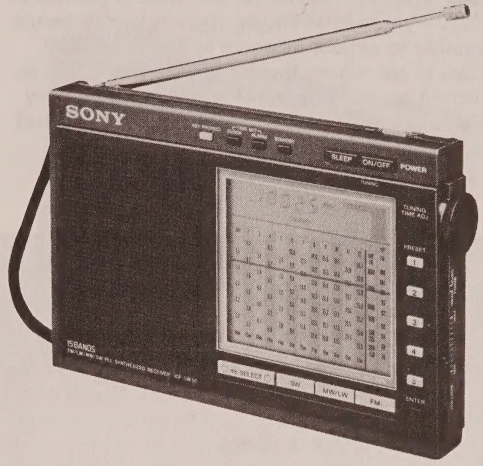
High-Tech Radio for the Technically Timid

SONY ICF-7700

SONY ICF-7600DA



The old Sony ICF-7600/7600A series was one of the great success stories of world band radio. In fact, its sales managed to pass the million-unit mark some time back—no small feat in the world band radio market. The main ingredients in the '7600's recipe were good performance, combined with compactness and ease of operation. As a result, for years the '7600 was the radio of choice for foreign correspondents and overseas government personnel. Even the globe-trotting U.S. Secretary of State Henry Kissinger had one for keeping in touch with the world during his myriad trips abroad.

High Tech Made Easy

It's in this spirit that Sony has replaced the '7600A with the totally new ICF-7700, sold outside North America as the ICF-7600DA. In a lot of ways, Sony has decided not to upset its successful applecart. While the 1988 '7700 is a high-tech redesign inside, outside it looks and operates very much like the '7600—with a few rather unusual exceptions.

The first clue to this is the dial. At first blush, it looks just like a regular analog dial, with numbers painted on for the various frequencies and a needle that goes up and down to show where you're tuned.

But here's the catch. This isn't an ordinary dial and needle at all. Instead, it's a huge LCD that's rigged up to look like a traditional dial face and needle. Turn on the radio and the needle appears; turn it off and it's gone.

All dial-and-needle frequency readouts are inherently imprecise, and the ersatz version on the '7700 is no exception. It moves jerkily, only every 20 to 25 kHz or so, functioning more as a pacifier for the technically timid than as a frequency indicator. So Sony went ahead and added an exacting digital frequency display to provide true accuracy.

That's not all about the '7700 that's designed to gladden the hearts of the technologically faint-of-heart. There is no keypad for frequency selection, only a standard tuning knob. Again, Sony has indicated that they don't want to intimidate customers.

Yet another simplification is that the set tunes only in 5 kHz single-channel increments, and there's no control to fine-tune between these 5 kHz points. To compensate for this, the '7700 uses a single wide bandwidth filter, one wide enough to let in stations a bit away from where you're tuned. As a result, the set is not terribly selective and gives out more than the usual assortment of howls and squeals. And since you can't detune, there's absolutely nothing that can be done about it.

Too, the '7700 segments the world radio spectrum into a dozen separate broadcasting bands. And, sure enough, the radio will tune only within those bands. So, if you want to hear, say, Iran on 9022 kHz, you're out of luck. Still, the coverage is quite generous, so the number of missed stations is small.

There are, however, five easy-to-use push-tuning buttons, like on a car radio. When you're listening to FM, you get five buttons for FM. When you're listening to world band radio, you get five for that, and so on. In all, a total of fifteen channels can be stored in the radio's "memory," which is enough for most people.

Features for Traveling

Because the '7700 is meant to be simple to operate, its list of features is largely limited to those of use to the traveler. These include a 24-hour digital clock, a sleep switch to allow you to doze off with the radio going, an alarm/clock-radio function to rouse you from your slumber, and a power safety switch to prevent the set from going on accidentally in your suitcase. There's also a tuning knob, a slider-type volume control, a two-step tone control, a single-LED "glow light" to aid in tuning, and an elevation leg to angle the radio towards the listener. Both the longwave and extended—to 1700 kHz—mediumwave AM bands are covered. FM includes both the usual 88–108 MHz band and the lower Japanese FM band that starts at 76 MHz.

For whatever reason, no dial light is provided. For $270—yen rise or no yen rise—it hardly seems reasonable to expect listeners to squint or light matches to see where they're tuned. The '7700, as you would expect from a set designed to be very simple to operate, doesn't handle single-sideband signals, either.

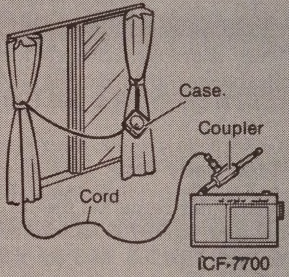
The '7700's audio quality is clean and crisp for pleasant listening to voice-oriented programs. Music sounds a bit "tinny," but it's no worse than on most other compact portables.

The new ICF-7700 is not the receiver of choice for active radio aficionados or high-tech types. It should, however, appeal to the non-critical world band radio listener with an aversion to anything smacking of high technology.

Free Clothesline

One "why-hasn't-somebody-thought-of-that-before" feature of the '7700 is that it comes with a 22½', or 6.8 meter, reel-in antenna—the AN-6—that looks for all the world like a tape measure that uses wire instead of tape. You simply clamp the end of the wire onto the set's telescopic antenna, then unreel it to wherever you want it hung. It's a great idea, and it can even second as a makeshift traveler's clothesline for underwear . . . although the case on ours tends to pop open accidentally—and it's no fun to reassemble. A piece of tape cures the problem.

Because the '7700 is reasonably sensitive, the AN-6 antenna is of use mostly for daytime listening and tuning in low-powered broadcasters within the tropical bands. At night on the lower world radio bands, the set tends to overload at times merely with the telescopic antenna. So more input from the antenna is just about the last thing you'd want. This tendency to overload is why the AN-6 is coupled inductively, rather than directly, to the set. Inductive coupling acts, in effect, like an attenuator to keep signal strength within acceptable bounds.



Best of the Easy-to-Operate Portables

PANASONIC RF-B60

Back in the late Seventies and early Eighties, Panasonic was a name to be reckoned with in world band radio. Their pioneering RF-2800 was the first digital portable to hit the market, and it was so successful that until early last year a variant of it—the GE World Monitor—was still being sold. History has left us other Panasonic gems: the RF-2200, which came with its own rotatable antenna and, later, an improved version of the '2800, the RF-2900.

These radios sold so well, in fact, that Panasonic promoted its world band radio design team into the computer hardware division. Unfortunately, the team that replaced them didn't do as well and Panasonic world band radios faded into the background.

Unusually Easy to Operate

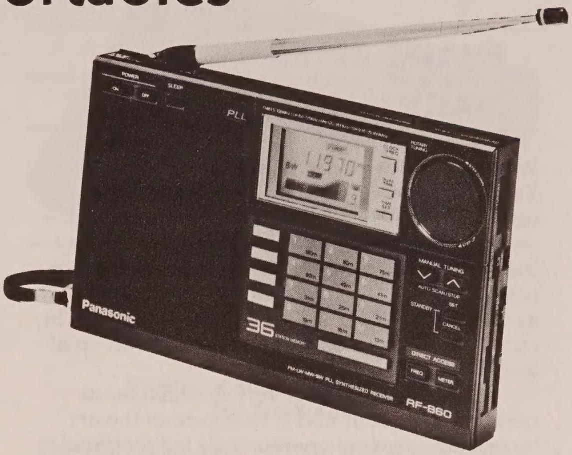
With the RF-B60 AM/FM/world band radio, however, Panasonic has stepped back into the market with a vengeance. What makes the 'B60 so special is the niche it has carved out for itself. In a world where most radios seem to be striving to cram so many buttons, gadgets and displays on their front panels that they could double as flight trainers for the space shuttle, the RF-B60 is refreshingly simple and easy to operate. If you want a world band radio that's all but foolproof to operate—yet which doesn't sacrifice performance for simplicity of operation—then this set is for you.

Variety of Tuning Options

The 'B60's tuning is state-of-the-art, while its size, weight and features combine to make it ideal for traveling. Tuning is in 1 kHz increments by either a conventional tuning knob or elevator-like up/down slewing buttons. There's also a handy pushbutton arrangement to zip from one band to another, along with a calculator-like keypad for instant access to desired stations.

The set also has 36 programmable memory channels, nine of which cover the world band radio spectrum. A nice touch is a flip-up chart to indicate which stations are in each memory.

Designers of portables try to keep protrusions to a minimum, as these tend to get hit and sometimes even knocked off while the set is being toted about. In this regard, the 'B60's tuning knob is interesting for two reasons. First, it appears as a conventional—yet almost flush—round knob on the front panel. But, in addition, it operates as a knurled control from the side of the set.



Superior Audio Quality

The 'B60 is a very compact radio. It's roughly the size of a paperback book and weighs in at just under two pounds—just the thing for air travel. And while most compact sets of this type provide only mediocre audio quality, it's clear that the people at Panasonic weren't about to make that mistake. The 'B60 sounds quite pleasant on all bands.

Limited Number of Features

There are other niceties, too. There are twin clocks, for example, and a lengthy two-year warranty. The 'B60 also has a somewhat optimistic digital signal-strength indicator with no less than fifteen increments.

The 'B60, unlike Sony's similar ICF-2003, doesn't handle single-sideband signals. For now, this doesn't mean much, as few, if any, broadcasters operate this way.

The 'B60 has only one selectivity position. It's well-suited to reception of ordinary international broadcasters, which tend to be quite strong. But it isn't so effective for rejecting adjacent-channel interference as, for example, the '2003.

Like most compact portables, the 'B60 has only fair field sensitivity with its built-in telescopic antenna and it's not designed to operate with an outdoor antenna. Also, alas, it doesn't have a dial light to aid in nighttime operation.

Logical Choice for Uncomplicated Operation

The bottom line is that Panasonic's compact RF-B60, which lists in the US at $269.95, is an especially appropriate choice for the world band radio listener who seeks worthwhile performance without a phalanx of high-tech controls. It's one of the easiest advanced-performance world band radios to operate, and its audio quality is clearly superior for such a small set.

Best Value in a Portable

PHILIPS 2935

MAGNAVOX D2935

While manufacturers in the Land of The Rising Yen have been dreaming of price rise after price rise, yet another manufacturer has landed in the world band marketplace—on all fours. This one—based in Europe—is the giant Dutch electronics conglomerate of Philips, also known in America as Magnavox. Their D2935 is truly a bargain. In fact, it's just about all you could ask for in an affordable portable.

The D2935's price is very reasonable, its performance good, and it uses state-of-the-art technology, making operation all but foolproof. It's also large enough to provide good audio quality without being too hefty to toss into your baggage. And, unlike most world band portables, it comes with a built-in ac power supply that works in just about any country of the world—a battery-saving bonus when you're traveling abroad.

As with the Sangean ATS-803, the makers of the '2935 have recently made improvements to their product. (You can identify the latest version by its large baby-blue 1⅛ inch, or 3 cm, power button.) It's more selective than the original model and it works better on mediumwave AM, too.

Easy to Operate

The D2935 is both flexible and easy to operate. It comes with a calculator-like keypad for push-button station selection, plus the customary tuning knob. A nice touch for nighttime listening is that the digital frequency display can be lit at the touch of a button. The strength of a station's signal is shown by a bank of five LED's.

Performance Above Average

The '2935 includes a relatively powerful audio stage with a single tone control and a fairly good speaker. The end result is above-average audio quality, although it's not quite in the same league as that of the larger but considerably more expensive Philips/Magnavox D2999; much less the top-sounding, but even more pricey, Grundig Satellit 650.

Other aspects of performance are also surprisingly good for a portable. Selectivity—or adjacent-channel rejection—is effective, although only one position is provided. Sensitivity with the built-in antenna is fairly good.

The '2935 is fairly stable, too—once a station is tuned in, you don't have to fiddle around retuning it. Dynamic range is reasonable by portable standards, but front-end selectivity is mediocre. What this means is that so long as the built-in antenna is used, most listeners won't hear other stations mixed in with the one they're trying to hear. But it also means that you shouldn't connect the '2935 to a fancy outdoor antenna. As is the case with most other portables, that could send it into a confusing fit of noises you don't want to hear.

FM performance is pleasant, although not quite equal to that of the similarly sized Grundig Satellit 400.

Now Widely Distributed

Until early 1987, the '2935 was distributed almost exclusively within Western Europe. Philips' North American subsidiary, Magnavox, didn't carry the receiver, and the parent firm wouldn't let other firms in North America handle it.

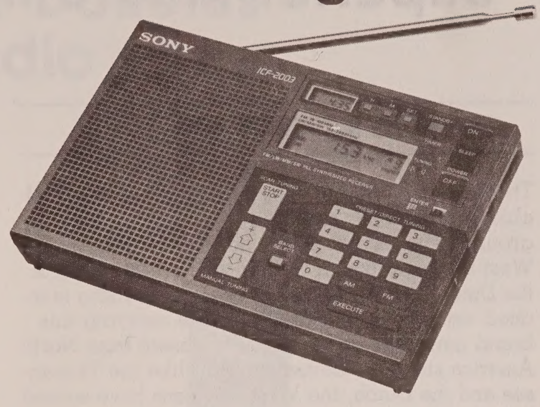
Now, all that's in the process of being changed. Officials at Magnavox have announced that by early 1988 they'll be carrying all three Philips world band portables, including the '2935, under the "Magnavox" label. In the US, the Magnavox D2935 lists for $249.99, and in Europe the Philips version is even cheaper.

In all, the Philips/Magnavox D2935 is clearly one of the best buys on the market today. It lacks some of the sophisticated features of the top-rated, but more pricey, Sony ICF-2010/ICF-2001D portable. For most listeners, however, the '2935's combination of price and performance makes it hard to pass up.

Travel Favorite in New Package

SONY ICF-2003

SONY ICF-7600DS



In the beginning, there was the Sony IFC-2001. In 1980, this radio almost single-handedly revolutionized shortwave listening with its LCD frequency display, keypad tuning and compact size. Three years later, the '2001 was updated and improved, becoming the ICF-2002. Back then, we were so excited about the '2002 that we called it "The most exciting entry into the shortwave market since the introduction of the ICOM R-70."

It's been some time since we wrote that review and once again, Sony has unveiled the latest generation of its revolutionary ICF-2001, this time dubbed the ICF-2003. The problem is that this time the review's not so gushy. What was once revolutionary is now routine.

Old Cognac in New Bottle

The new '2003 is virtually identical to the '2002 except that it comes with a newly designed cabinet and special accessory antenna. Smaller than a copy of this book, the '2003 is light enough even for those who trot the globe with nothing more than a sandwich in a paper bag.

Many Features for Compact Portable

Unlike the simpler-to-use sibling ICF-7700, the '2003 is equipped with a wide array of features. There's a scanner, for starters, and a keypad that not only serves to enter frequencies, but also to activate the ten memory channels. For tuning around, the '2003 uses elevator-like up/down slewing buttons instead of a conventional tuning knob, but their movement is limited to 5 kHz increments, although a little knob at the side allows you to tune more finely.

A separate clock/timer display is positioned above the frequency readout. This means that you can see what station you're listening to—as well as the time—at the same moment. The '2003, unlike either the '7700 or Panasonic's RF-B60, also handles single-sideband signals, although there is only limited interest in this type of transmission. There's a useful power lock, too, to help prevent the radio from turning on accidentally in your luggage.

Uncorrected from the '2002 is the radio's essentially useless, single-digit LED signal strength indicator. This is about as useful as an igloo in the Sahara. Even more baffling is the continued absence of a dial light.

Generally Superior Performance for Small Radio

The '2003 does have very good skirt selectivity (rejection of interference from stations on adjacent channels). For those who enjoy hearing the more difficult world band stations, this gives the '2003 an advantage over such competing models as the '7700 and 'B60. Dynamic range and spurious-signal rejection are both at least average for a portable.

On the other hand, sensitivity with the built-in telescopic antenna may disappoint some. To get around this, Sony has equipped each '2003 with the AN-6 reel-in antenna described in our review of the '7700. This helps, and works even better when the inductive connector that hooks onto the radio is snipped off and replaced with a direct-connecting alligator clip, available at nearly any electonics parts store. Another easy trick that sometimes helps boost sensitivity is to run the radio off ac instead of batteries. For this, you need to purchase a separate power supply accessory.

Audio quality is, unfortunately, nothing to write home about. As with previous versions of the model, it's weak and tinny with music, although for listening to voice broadcasts in quiet rooms it's more than adequate.

The '2003's FM high sensitivity is typical of Sony's world band radios. This is great if you live in the remote countryside, where stations are invariably weak. but urbanites have to put up with the '2003's propensity to suffer from spurious signals when there's a strong station in the area. If you don't live in the hinterland and want superior FM on a world band portable, look to Grundig or Panasonic, instead.

No other compact portable quite equals the '2003's combination of reasonable price, very good selectivity, flexibility of operation and compactness. For the sophisticated listener who doesn't want or can't afford Sony's excellent but complicated ICF-2010 portable, but who finds the '7700 simply too restrictive, the '2003 is an excellent choice.

Superior Audio in a Portable

GRUNDIG SATELLIT 400

The final non-Japanese entry into the range of affordable portables has a multifaceted national background. The Satellit 400, made in Portugal by the West German firm of Grundig, is a subsidiary of the Dutch firm of Philips. And while Grundig is indeed well known in Europe, radios carrying this brand name have been virtually absent from North America since the Seventies. But, like the Taiwanese and the Dutch, the West Germans have sensed both the declining participation of the Japanese and the increasing popularity of world band listening in North America. So, in they have come . . . with vigor.

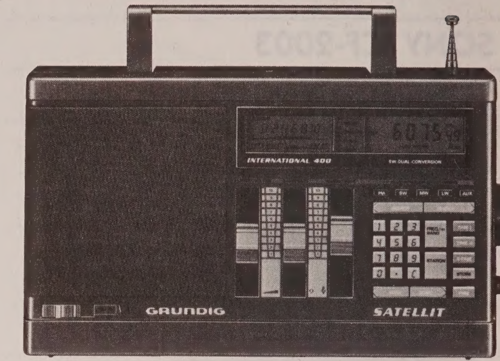
Actually, Grundig resurfaced in North America only last year when the American firm of Lextronix obtained exclusive rights to distribute the West German company's audio and video products. Included in Lextronix's line of Grundig audio products are two world band radios, one of which is the $449 Satellit 400.

The '400 covers the longwave, mediumwave AM, FM and world radio bands. It uses, of course, a knob to tune stations. But, additionally, it has an easy-to-use keypad for direct frequency entry, plus a scanner and 24 programmable channel memories to store—like on a car radio—your most listened-to stations. Additionally, there are up/down band slewing buttons for world band radio that second as a signal seeker in other bands.

Numerous Travel Features

For traveling, there's a nice, solid flip-up handle that's extremely handy. The fused ac power supply is built-in and dual-voltage for worldwide use. In North America, the '400 also comes with an ac plug adapter that allows the set to be operated from the most popular types of wall sockets in most countries.

The '400 incorporates two clocks and a timer, which is handy for making sure you get up on time when the hotel desk clerk forgets your wakeup call. But the clocks and frequency share the same digital display, so you can see only one of these three at any given moment. If you're listening at night, you'll be pleased to find that the '400 has a light that illuminates both the digital frequency readout and the large analog signal-strength/battery check meter.



Generally Worthy Performance Except for Single Sideband

In all, for listening to world band radio, the '400 performs fairly well. Distortion in the AM mode is uncommonly low, and ultimate rejection is superb. While only a single bandwidth is used, it's well chosen and performs nicely. Dynamic range is acceptable, but this travel receiver is obviously not designed to be connected to a lengthy outdoor antenna unless you want to encounter the mish-mash of stations heard all jumbled together that's known as "overloading."

However, spurious signal rejection is substandard and the '400's tuning circuitry is slightly unstable below 9 MHz. This latter characteristic results in a slight wavering in voices and music heard, plus seriously deficient single-sideband reception.

Grundig radios are known for their superb audio quality, and the '400 is no exception. It has special high-frequency audio filtering for when world band stations are being received, separate bass and treble controls, plus a high-quality audio stage and speaker. So it sounds quite good . . . although it's definitely not in the exceptional league of its bigger, and more expensive, brother, the Satellit 650. The '400's FM performance—especially its capture ratio—is also top drawer. At our *Radio Database International* listening post, located between New York and Philadelphia, you can place the '400 on a single FM channel and find two or three stations popping in separately and clearly simply by rotating the antenna.

In all, the '400, being in the Grundig tradition, is designed not for "DXing" but, rather, for unusually pleasant listening to the more easily heard radio broadcasts.

Handheld Scanner Doubles as World Band Radio

SONY ICF-PRO80

SONY ICF-PRO70

Most advanced-technology radios are specialty products designed to do one thing well: bring in the world by radio. Some also excel at receiving FM broadcasts, and yet others succeed at receiving specialized radio signals—ships at sea and the like.

Sony's new ICF-PRO80, however, tries to do all of these . . . and more. With this $419.95 portable, you can tune in all manner of police, fire and aircraft communications, along with such arcane chitchat as the back-and-forth of security agents. In short, this is what's referred to as a "handheld scanner." And it's a pretty sharp-looking one, at that. Hold one in your hand and you can easily picture yourself directing dozens of hooks and ladders at a seven-alarm blaze.

Few World Band Features

What makes Sony's scanner different is that it also picks up world band broadcasts. However, the 'PRO80 lacks many of the features found on competing world band portables. There's no tuning knob, no signal-strength indicator, no clock and no timer or sleep control. If you want to receive single-sideband signals, you have to settle for just that: single sideband. There's no way to separate lower from upper sideband as there is on better world band radios. And the excellent synchronous detector found on Sony's less-costly ICF-2010/ICF-2001D portable is nowhere to be found.

Too, the 'PRO80 tunes only in 5 kHz increments. There's a supplementary fine-tuning control, just as on the Sony ICF-2003/ICF-7600DS that costs half as much. Also like the '2003, the 'PRO80 has a set of up/down slewing buttons for bandscanning. In addition to the keypad, there are no less than 40 memories to store your favorite stations.

Mixed Performance

World band performance varies from the mediocre to the outstanding. On one hand, the 'PRO80 is very stable, so it doesn't need retuning from time-to-time. Additionally, it's sensitive throughout the world band spectrum, so even weak stations tend to be heard. Its dynamic range is superior for a portable, too, so it's likely to function nicely even in such high-signal-strength parts of the world as Europe and North Africa.

Selectivity, however, is a mixed bag. On one hand, ultimate selectivity is remarkable for a portable—or even a costly tabletop communications receiver. Too, there are fully three bandwidths, two of which are useful for listening to world band broadcasts. These bandwidths are well chosen. Nevertheless, skirt selectivity is inferior to that found on less-costly Sony portables, such as the ICF-2010/ICF-2001D.

At the other end of the quality scale, spurious-signal rejection is mediocre. As a result, unwanted signals tend to pop up in various parts of the world radio bands where they don't belong. The problem with this is that these "repeats" can cause unnecessary interference to stations you're trying to hear.

Modest Audio Quality

The 'PRO80 might be OK if it stopped here, but its audio quality—because of moderately high distortion and a tiny speaker—is mediocre. Listening to chitchat from the local fire house with this device is one thing, but trying to enjoy a clear broadcast from, say, France with the 'PRO80 requires some degree of aural forbearance.

Good Overall Scanner Performance

According to scanner expert Bob Grove of *Monitoring Times*, the 'PRO80 performs fairly well as a handheld VHF scanner. It's sensitive, reasonably selective, its squelch works well, and its scan rate is not too slow. The problem is in trying to operate it, particularly within the 151-174 MHz "high band" and 174-223 MHz TV band (channels 7-13) found on the 'PRO80, but not on the 'PRO70.

Peculiar Ergonomics

The major ergonomic characteristic is that the 'PRO80's role as a handheld scanner has resulted in a set that is unusually complicated to operate. For example, its keypad tuning scheme requires more button-pushing than do those of most other portables. And changing bandwidth calls for pushing two buttons, rather than the usual one, simultaneously.

Too, the volume control is shared with the two-step tone control, and it's located right next to the screw-on telescopic antenna. As a result, this often-used control is awkward to operate, especially when the button control is depressed to the "low" tone position.

But when the 'PRO80 used as a high-band VHF scanner—the 'PRO70 only receives the 30–50 MHz "low band"—the ergonomics become ludicrous. Simply to be able to *tune* the high band, you first have to remove the battery pack, reach into the battery cavity to flip a minuscule switch secreted within, reinsert the battery pack, unscrew the telescopic antenna, screw on the high-band VHF converter module, reattach the antenna, press the "Program" and "Direct" buttons simultaneously, press "11500" to command the receiver to function with the high-band converter, then press "Execute." If your patience hasn't been exhausted, you're now ready to try tuning the high band.

Of course, the entire procedure has to be reversed when you wish to leave the high band and tune the low band . . . or, God forbid, listen to world band or local broadcasts!

All ergonomic characteristics aren't negative, however. The 'PRO80 comes equipped with an easy-to-use display light that fades out automatically after several seconds. This makes nighttime listening much handier than on such unilluminated portables as the Sony ICF-7700/ICF-7600DA.

In short, the Sony ICF-PRO80 occupies, with mixed success, a niche for radio buffs who wish to have a handheld portable that "does it all."

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Europe's Finest Portable

GRUNDIG SATELLIT 650

The Grundig Satellit 650 is the best of the breed in Germany's world band stable. Although it weighs in at a bicep-building 20 pounds, or 9 kilograms, it is—nominally, at any rate—a portable. Priced around $1,000 in the US, the '650 provides not only worthy overall performance, but also exceptionally pleasant audio quality and a wide array of useful features. FM performance is also top-drawer.

However, the '650—like virtually all other current portables—is not fully equal to the rigors of fishing for faint catches from within congested bands. It's oriented, instead, to allowing you to hear programs pleasurably, hour-after-hour. For serious "DXing," one looks to tabletop models.

Wide Variety of Features

In addition to the usual knob tuning, the '650 also has keypad tuning and no less than 60 memories, 32 of which can be used to store favorite world band stations. The large digital display, which provides readings to the nearest kHz, is easy to read even if your contact lenses are soaking.

The '650 also comes equipped with a tuning knob incorporating "variable-rate incremental tuning" (VRIT). With this, the faster you spin the knob, the more quickly the stations zip by. That's nice, but it can be tricky if you turn the knob too fast.

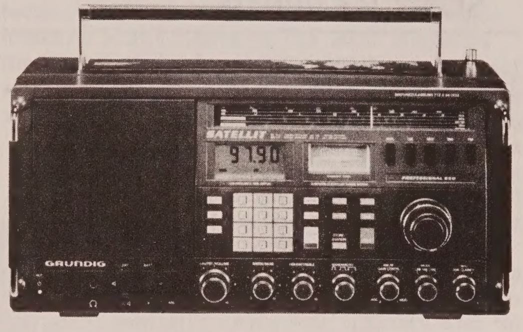
Helpful features include a digital clock, which displays seconds and uses the 24-hour clock format appropriate to World Time, and a programmable timer with up to three straightforward on/off cycles per day. A large, easy-to-read analog signal-strength meter—which doubles as a battery strength indicator—is included, too. The '650 also comes with a dual-voltage ac power supply suitable for use worldwide.

There's a motorized "tracking" preselector that automatically peaks the set's circuitry to exactly where you're tuned. It's a great idea that's something of a throwback to higher-quality designs of an earlier era. It doesn't quite live up to its performance potential, but it does add to the receiver's complexity and potential for malfunction.

Overall Performance

Sensitivity, using either the built-in telescopic antenna or an external antenna, is very good. Blocking, a related measurement, isn't, though.

On the face of it, the '650, which has no less than three bandwidths, should have top-notch selectivity to cope with strong competing signals on adjacent channels. However, the intermediate bandwidth uses only a simple audio filter. Shape factors—another measure of selectivity—are also not what they could be. Still, selectivity is adequate for most world band listening purposes.



Portables usually have mediocre dynamic range, and the '650 is no exception. It's fine for when you're listening with the built-in telescopic antenna, and if you live in the Americas you'll find it to be adequate. But listeners in Europe and other high-signal-strength parts of the world should be conservative when using the '650 with an outboard antenna. Otherwise, "overloading"—a mishmash of false signals all jumbled together—can be heard.

Top-Notch Audio Quality and FM Performance

Compared with other world band radios, the '650 has audio that is *par excellence*. Included are effective separate bass and treble tone controls, plus excellent speakers and even a tweeter switch. This is where the German engineers really did their homework. No other world band radio, regardless of price, sounds quite this good.

Pleasant Listening

For pleasant listening to foreign stations—but not serious "DXing"—the '650 is hard to beat. Its size notwithstanding, it also functions as a fully self-contained field portable for use on automobile trips and around your property. As a bonus, it also works unusually well in receiving FM and other closer-by broadcasts.

The Prince of Portables

SONY ICF-2010

SONY ICF-2001D

Let's get right to the point. No other world-band portable currently on the market quite equals the overall performance of Sony's ICF-2010, sold outside North America as the ICF-2001D. It utilizes exceptionally advanced circuitry to provide sophisticated and effective reduction of interference; yet it can be operated by most laymen.

The '2010 thus represents a major advance over conventional world band radios. This state-of-the-art portable is midsize, yet small enough for most travel. It covers the entire world band radio spectrum, plus longwave, mediumwave AM (including the proposed extension in the Americas), FM (both the Japanese and Western FM bands), plus the 166–136 MHz VHF aeronautical band to allow globetrotters to eavesdrop on airline traffic. A single-voltage outboard ac converter comes with each set.

Wealth of Features

The front panel of the '2010 literally bristles with pushbuttons, making it, at first glance, look like something dreamed up by a mad scientist. Remarkably enough, most of these pushbuttons each have *two* functions, allowing the radio to do all manner of handstands, such as leaping from one band to another. It takes the better part of an hour with the instruction manual to get even a rudimentary grasp of the set's 76 switches, knobs, buttons and sliders.

Housed within this radio is a scanner, 32 programmable channel memories, control-locking facilities, keypad tuning . . . plus on/off and a power lock so the radio won't go on accidentally in your suitcase.

The dial light, by the way, has a nice little battery-saving feature of its own: it turns off automatically after fifteen seconds. Of course, this same feature can drive you nuts if you're busily scanning about the bands at night and every fifteen seconds the light keeps turning off. In any case, battery consumption is above average for a midsize portable, but isn't out of line for a set of this performance caliber.

The timer can turn on the receiver automatically up to four times a day in order to catch favorite broadcasts stored in up to four separate memories, then turn it off again 15, 30 or 60 minutes later—a bit annoying if what you wish to hear doesn't last 15, 30 or 60 minutes. The sleep switch can be used to turn off the set automatically. You can even go to sleep listening to one station, yet be awakened to another.

You can also use this capability to tape broadcasts automatically, using the '2010's timer, much as with a VCR. The '2010 doesn't come equipped to do this on its own, but one American firm, Solar Light Co., produces a radio-to-recorder interface accessory—the CC-2020—for this purpose.

The '2010's thirty-two memories are handy in that they allow not only the frequency, but also the bandwidth and mode—including synchronous detection, if desired—to be preprogrammed by the listener for future access. This is the sort of advanced technology heretofore found only on costly tabletop communications receivers. Yet, even with all this flexibility, the memories are straightforward to "program."

The '2010 is laden with other useful features, including a clock that operates in either the 24-hour (World Time) or 12-hour (local time) mode. Another feature is the '2010's 10-LED signal-strength indicator, which seconds as a battery-strength indicator.

Overall, the '2010's audio certainly is acceptable, even fairly good. But this is faint praise, indeed, considering how good the '2010 can sound when its record output is fed through a good audio/speaker system.

Worthy Overall Performance

The '2010—except for within the VHF aeronautical band—is adequately sensitive, provided the batteries are not run down. Weak batteries tend to cause a number of problems in the ICF-2010. Both bandwidths provide good selectivity, as well. In addition, dynamic range and other earmarks of a set's ability not to generate spurious signals are above average for a portable.

The '2010 is sensitive on FM—a plus if you live in a rural area far removed from any FM stations. But in urban areas the '2010 tends to produce spurious signals and to overload. As with overloading on the world bands, that on the FM band may be alleviated, at the expense of reduced sensitivity, by reducing the length of the telescopic antenna. Similar shortcomings, coupled with low sensitivity, are found within the VHF aeronautical band. In some locations FM broadcast signals also penetrate into the '2010's shortwave circuitry, causing distorted interference to world band signals.

The initial version of the '2010, which has long since disappeared from dealers' shelves, suffered from various problems with digital-circuit noise and the battery cavity. Sample-to-sample variations in performance were also distressingly high. Fortunately, most of these difficulties have now been overcome.

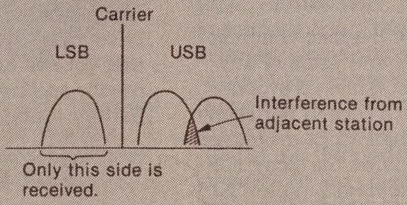
Some years from now, all shortwave—and mediumwave AM—radios will have advanced detection/interference-rejection circuitry such as is found on Sony's innovative ICF-2010. Although the $389.95 '2010 shouldn't be mistaken for a serious tabletop receiver, it is the obvious choice if you are seeking a world-class travel portable.

What Makes the '2010 So Special?

What puts the '2010 a generation ahead of the pack is a feature called synchronous-detection. Here's how it works. World band and mediumwave AM broadcasters alike operate in what's known as the "AM mode." That's why the mediumwave band is usually referred to as the "AM band," even though the AM mode is also used within other bands.

The AM mode consists of three parts: two "sidebands" and one "carrier." The sidebands contain the information—speech, music and so on—while the carrier is the "vehicle" that carries that information. Perhaps it's easiest to think of the carrier as being like a sheet of paper, with the sidebands being the "ink"—information—on that sheet of paper.

Why two sidebands? How do they differ? The answer is, quite simply, they don't, unless a broadcast is in stereo. So, in monaural, it would seem as if only one would be needed. The problem is that if you eliminate one of these sidebands, distortion rises enough to make listening unpleasant. But with synchronous detection, you can listen to just one sideband by itself without adding distortion. In fact, synchronous detection tuned to only one sideband actually reduces distorion over what you'd hear on an ordinary radio tuned to both sidebands!


Carrier
LSB
USB
Interference from adjacent station
Only this side is received.

But the real advantage is that synchronous detection allows you to select the sideband that is less bothered by interference from competing stations on adjacent channels. For example, if you're listening to the BBC on 5975 kHz, and it's being bothered by the USSR on 5980 kHz, you can tune into the BBC's lower sideband and knock out the Soviet interference. This improves world band reception considerably at times, and is also helpful in improving twilight reception on the longwave and mediumwave AM bands.

The '2010's synchronous detector is remarkably straightforward to use once you know how. Unfortunately, the ICF-2010 owner's manual treats the whole subject of synchronous detection too briefly and in arcane language which inadequately explains this major plus. However, our *RDI White Paper* on the '2010 remedies this by explaining how it should be used.

Superior Audio from a Top Performer

KENWOOD R-5000

TRIO R-5000

Because moderately priced world band portables are now so good, fancy tabletop sets might seem to be superfluous. But just as there are monitor TV's to complement the ordinary variety, so there are exceptional tabletop receivers that stand out from the common herd. Among these are a handful of elite models that excels at flushing out tough catches. The newest—and in some ways, the best—of these is the recently introduced Kenwood R-5000, known in the United Kingdom as the Trio R-5000.

Exceptional Receiver

Is the world ready for yet another gilt-edged performer? For at least some perfectionistic listeners, the answer is a resounding "Yes!" Costly tabletop receivers usually have disappointing audio quality, but what makes the R-5000 so interesting is its audio, which is clearly superior by world band standards. It sounds great.

The '5000 provides one of the best combinations of performance, features and price of any tabletop model tested to date. While its ergonomics are only fair, the '5000 is a superb performer. Its only real shortcoming is the lack of a synchronous detector, such as is found on the Sony ICF-2010/ICF-2001D or the forthcoming Liniplex F2.

The '5000, as you would expect, covers the longwave, mediumwave AM and world radio bands in nearly every mode imaginable. It comes in three versions, depending on where you buy it: a US version that works only from 108–132V ac; a Japanese version for 90–110V ac; and—best—a multivoltage worldwide version that operates from 108–132, 198–242 or 216–264V ac. In Canada both the worldwide and US versions have appeared for sale thus far.

Features Aplenty

The '5000 is all but dripping with just about every feature imaginable. Among these goodies are two switchable antenna inputs; 100 memories that store frequency, mode, and antenna; keypad and multispeed knob tuning; Megahertz up/down slewing controls to allow for large tuning leaps; a scanner of sorts; true passband tuning ("IF shift"); selectable fast/slow automatic gain control decay; a tunable audio notch filter to eliminate howls and squeals; two adjustable noise blankers; two 24-hour clocks; a simple on/off timer; a three-level switchable attenuator; an analog signal-strength meter; a front-panel-display dimmer; plus RF gain and squelch controls.

The only thing this receiver lacks is synchronous detection and a sophisticated scanner along the lines of that of the Japan Radio NRD-525.

The synthesizer tunes in tiny 10 Hertz segments, and the frequency actually displays to this precise degree of resolution. Two voice bandwidths—6.3 kHz and 2.5 kHz—come standard, with a third—1.9 kHz—being available as an option. Additionally, some specialty vendors offer additional bandwidths.

The '5000's timer and recording socket, in conjunction with a DIN socket on the rear panel, provide for full on/off control of a tape recorder. An optional interface is also available to allow the computer to interact with the receiver.

Another plus is that the all-important microprocessor software that is responsible for operation of the receiver is permanent on the '5000. You don't have to worry, as you do with the ICOM IC-R71, that your radio will roll over dead, like a cockroach, and need factory repair because some battery inside the set conked out.

Ergonomics Acceptable

Ergonomics determine how handy and restful your receiver will be to operate. Overall, the ergonomics of the '5000 are reasonable. Most controls and displays are where they should be and operate smoothly and fairly logically. And while keypad operation could be simpler, it is as user-friendly as one of these receivers gets.

The digital readout consists of a multicolored fluorescent display that tells you just about all you'll ever want to know about what the set is up to. A plus is that any one of the two 24-hour clocks displays independently of the frequency readout so it can always be seen. Light-emitting diodes (LED's) on the front panel also add to the sense of knowing what's what. As if this weren't enough, when the mode (USB, AM, etc.) buttons are depressed, the speaker chirps out the selected mode in Morse code. This chirping can be a gimmicky annoyance, but if your vision is impaired it can also be useful.

Superb Overall Performance

One of the main criteria for worthy performance concerns how well a receiver copes with signals from adjacent or other nearby frequencies. Here, there is both good news and bad.

The bad news is that the 6.3 kHz "wide" bandwidth filter that comes standard with the set has skirt selectivity far worse than that of a simple $99.95 Sony portable. Indeed, at −60 dB, this filter—actually, a pair of cheap little filters in tandem—measures a whopping 24.8 kHz!

The good news is that this is easily remediable. Kenwood offers the optional high-quality YK-88A-1 6.5 kHz replacement "wide" crystal filter. It performs superbly, measuring only 10.5 kHz at −60 dB—quite an improvement, indeed! It's easy to install and requires no soldering.

Kenwood deserves a collective onion for pulling this stunt. A "wide" bandwidth filter isn't a luxury feature—it's one of the most-needed parts of a world band receiver. To sell the set with a filter so obviously mediocre, then offer the correct filter as an extra-cost option, is reminiscent of the days, years back, when Chevrolet used to offer its oil filter as an option.

The '5000 also comes with a 2.5 kHz "medium 2" standard bandwidth and a 1.9 kHz "medium 1" bandwidth. Both—thankfully—are excellent, and the overall effect of these three voice bandwidths is one of real flexibility.

Sensitivity and the related "blocking" measurement are both top-drawer. If something is there to be heard—even if it's feeble—the '5000 will snatch it from the tireless grip of the airwaves. However, dynamic range, although adequate, is only fair—slightly worse than that of the Japan Radio NRD-525.

Superior Audio Quality . . .

Ridiculous as it might seem, there are costly world band receivers being turned out that distort worse than cheap telephones. This doesn't necessarily mean that your ears will immediately rebel. In fact, to some listeners a radio with moderate distortion sounds fine. But regardless of how finely tuned your ears are, even low levels of distortion eventually produce aural fatigue. Listening over long stretches of time tends to become tiring, even producing headaches.

The '5000, except when used to make tape recordings, sounds much better than most tabletops. Overall distortion is low, allowing listening to be a pleasure—not just tolerable—over extended periods of time. Additionally, less "hiss" is heard with the '5000 than with some other world band radios.

But the audio's not all Fat City. The '5000 has no tone controls, although the passband tuning circuit can be used to some extent to shape the tone. Additionally, with strong sounds you can sometimes hear "breakup" distortion. The noise blankers can also cause distortion, and the small upward-facing speaker is no prize. A high-quality outboard speaker—other than Kenwood's pedestrian SP-430 optional unit—is needed.

In all, the performance of the '5000 is top drawer. At last, there is a serious world band receiver that excels not only at ferreting out Radio Flyspeck, but also at listening to hour-long concerts from London.

One of the Best Is Now Even Better

JAPAN RADIO NRD-525

For those who demand the very best, there is a handful of elite communications receivers that are the BMW's and Jaguars of world band radio. One such model is Japan Radio's $1,285 NRD-525.

If you're looking for a quality constructed receiver with nearly every feature imaginable, the '525 is all but in a class unto itself. For one thing, it comes with an unusually sophisticated scanner that allows the set to tune itself while unattended. For another, its modular plug-in board construction considerably reduces the complexity of repairs.

Current Versions

There are three versions of the '525.There's really no difference among these except that they come preset from the factory to the correct local ac voltage. All have the same multivoltage capability.

The "U" version is intended for the United States and various other countries with a 120V ac power standard. The "E" version is intended for use in Europe and most other parts of the world where 220-240V ac is the norm. The "J" version is intended for use in Japan, where 100V ac is used.

Do you need to buy the special "U" version if you live in the United States? Or a "J" version if you live in Japan? Hardly. All you have to do is adjust a control on the back of the radio to your correct voltage and put in the proper fuse.

Handy to Operate

Operating controls should be laid out so they are logically located and easy to use. In order to provide the operator with a high degree of operating flexibility, Japan Radio did not take the usual expedient route and clutter up the '525's front panel with tiny controls suitable for an elfin. Instead, creative engineering and design have allowed the '525 to be operated comfortably and logically. Too, most of the controls—keypad buttons excepted—have above-average "feel."

Flexible Tuning

The '525 gives the user numerous ways to tune in a signal. In addition to the traditional tuning knob—the mainstay of any operator-controlled receiver—there are also up-down slewing buttons to aid in rapid bandscanning, a keypad for direct frequency selection, the scanner, and no less than 200 programmable channel memories. Additionally, the receiver is potentially well suited to whatever computer-controlled mischief world band radio hackers may come up with.

The '525's built-in timer can be used to turn the set on and off each day, adding further to the set's robotic capabilities. Too, the timer is designed to control a tape recorder at the same time.

So, this state-of-the-art radio will select channels, tune and retune them for high-quality reception, turn itself on and off, and even record your favorite programs when you're not home . . . just like a good VCR.

Rock-Solid Stability

The Japan Radio NRD-525, like the Kenwood R-5000 and ICOM IC-R71, is an exceptionally stable receiver. This makes it well-suited to unattended reception of stations by allowing you to tune in only one side of the signal—rather than both, as is the usual case—thus avoiding interference from any station alongside the one you're trying to hear.

The reason for this is that world band radio signals consist of two identical Siamese-twin-like parts. With certain radios, you can listen to just one of those two parts—the quieter one.

Why Siamese-twin transmissions? This "twofer" approach allows signals to be received without heavy distortion on inexpensive radios. But for pricier sets—and even the Sony ICF-2010 portable—you can actually select the desired sideband.

Good as the '525 is in this regard, it's hardly ideal. It doesn't include synchronous detection, which is found on the far-cheaper '2010. Synchronous detection can allow the desired sideband to be selected even better.

Special Features Help Improve Reception

The '525 uses a passband tuning control to help reduce interference and improve audio fidelity. For example, if a signal is "boomy," the passband tuning control can be adjusted to an outer edge of the signal to incorporate more high, or "treble," audio frequencies and fewer low, or "bass," frequencies. This sort of flexibility is a real aid not only in hearing difficult stations, but also in listening to music and voice programs from major world broadcasters.

Another useful feature of the '525 is its tunable notch filter. This helps reduce the howls and squeals often associated with world band radio listening when there's lots of interference from competing stations. The '525 also comes with a noise blanker that's unusually effective in coping with the *tap-tap-tap* of Soviet over-the-horizon radar that sometimes interferes with world band radio listening.

Up to Three Bandwidths

Every receiver needs at least one bandwidth filter, preferably more, to select the desired station out of the morass of competing stations on the air. A bandwidth filter acts as does a cattle chute to let through only one bull—or station—at a time.

For voice and music, the '525 comes with filters that provide two bandwidths: 5.7 and 2.2 kHz. Both bandwidth filters have very fine performance characteristics, but in a radio of this caliber a bandwidth roughly midpoint between these is called for to give optimum flexibility for the wide variety of reception situations encountered on the world radio bands.

There are provisions for just such a third bandwidth filter. Although no suitable filter is presently available from Japan Radio, some dealers will install, at extra cost, a high-quality Collins 3.8 kHz filter that fits the bill almost perfectly.

Audio Quality

Most communications receivers tend to have mediocre audio reproduction. This is not so illogical as it might seem at first blush, as typically they are purchased by the military and the like. These outfits could care less about hearing music clearly. All they want is good voice reproduction, like on a telephone.

The '525 is no exception, plus there's a slight persistent "hiss" audible in the background. Additionally, if an unshielded antenna lead-in is used, digital-circuit whine can be heard, like the "hiss," at low level.

The bottom line is that for listening to both voice and music programs, the aural quality of the '525 doesn't equal, for example, that of the new rival Kenwood R-5000 or the Grundig Satellit 650.

Improvements for 1988

Originally, the '525 could only be tuned very slowly. Now, units with serial numbers BR36771 and higher allow you to select between a tuning rate of either 2 or 20 kHz per revolution, as well as a slewing rate of either 1 or 10 kHz.

As the '525 comes from the factory, it's programmed such that the user has to fiddle with the tuning controls to receive lower or upper sideband. With early units, this was the only way the set could be tuned—a pain if you're trying to select a sideband. Now, units as of serial number 36471 don't require this. By initiating a simple keypad command, you can bypass this annoyance altogether.

Fortunately, Japan Radio didn't forget its existing customers. Owners of older versions of the '525 may bring their existing units fully up to date by installing a "New-ROM IC Kit," about $40. This requires only that the new plug-in ROM be substituted for the old and a single wire be cut. No soldering is needed.

Overall, the Japan Radio NRD-525 is an unusually well-constructed and easy-to-repair receiver that provides superb performance. It lacks synchronous detection and its audio quality is not all it could be. Nevertheless, it's one of the few truly superb tabletop world band receivers available. And it's likely to have an unusually long operating life, to boot.

A Favorite for Hearing the Tough Ones

ICOM IC-R71

World band tabletop radios used to be so esoteric and unfriendly to operate that only the most dedicated took them to heart. Now, advanced technology has changed all that. Most of today's high-performance receivers are not much harder to operate than, say, a Sony ICF-2010/ICF-2001D portable or a good VCR.

There are three models priced in the vicinity of $1,000 that qualify as first-rate receivers: Kenwood's R-5000, Japan Radio's NRD-525 and ICOM's IC-R71. The chief difference among these is audio quality, with the '5000 being the best in this regard and the 'R71 being only fair—although adding a good external speaker helps. However, beyond this there are other differences that can make one model a favorite over others.

Unique Variable-Bandwidth Control

The $949 'R71 has the expected array of sophisticated operating controls—keypad tuning, a digitalized tuning knob, 32 memories for favorite stations, and so on. The narrower bandwidths provide breathtaking overall tough-signal performance, while the widest is at least average for a worthy receiver.

But there is a tradeoff between the ability of a receiver to eliminate adjacent-channel interference, on one hand, and to maintain acceptable audio quality, on the other. As the bandwidth is narrowed to eliminate interference, the audio quality of the station you are trying to hear gets worse. So the idea is to narrow the bandwidth no more than necessary to eliminate annoying interference.

On most receivers, you have only some fixed bandwidths from which to choose. If these are, say, 7 and 3 kHz, you may find that at 7 kHz you get good audio quality, but too much interference. At 3 kHz the interference may be gone, but the audio quality will be degraded.

The 'R71 has fixed bandwidths, like the rest. But, in addition, it has a unique variable-bandwidth feature—called, misleadingly, "passband tuning"—that allows you to adjust the bandwidth *exactly* to the "sweet spot" for any given station. As you turn this control, you can set it to, say, 4.7 kHz for one station, 2.4 kHz for another, 3.5 kHz for another, and so on. It's an excellent feature totally absent from competing models, and it can be made even better by the addition of ICOM's $178 FL44A filter accessory or a similar filter from independent sources.

15.710.0 32
ICOM
COMMUNICATIONS RECEIVER IC-R71A

You don't have to use the continuously variable bandwidth feature, either. If you don't need it, you can simply use the fixed bandwidths just as you would with any other receiver.

Whistle Filter of Limited Use

The 'R71, like the R-5000 and the NRD-525, comes with a tunable notch filter that can reduce some of the whistles and howls heard in the world radio bands—particularly the tropical bands. Unfortunately, unlike those of the '5000 and '525, that of the 'R71 does not operate in the AM mode. This is no small drawback, inasmuch as nearly all world band broadcasters operate in that mode. If you want to use the notch, you have to tune a broadcaster as though it were single-sideband.

One thing the 'R71 doesn't have is synchronous detection. It's a pity, but none of the three elite world band receivers currently on the market incorporates this fidelity-enhancing feature already available on the far-cheaper Sony ICF-2010/ICF-2001D portable reviewed elsewhere in this Buyer's Guide.

Dead Battery Means Inoperative Radio

A unique drawback of the 'R71 is that its operating software, needed to make the set work, must be reprogrammed by an ICOM service center should an inboard lithium battery go dead. The chances are that the radio will be headed for the scrap heap before its battery dies, but with the '5000 and '525 you don't have to take this gamble. Fortunately, ICOM has indicated they will be making this repair available indefinitely.

Outstanding Tough-Signal Performance

There are several variables that can help predict how well a radio will pick up a weak station, especially when there are powerful competing stations nearby. High sensitivity, low noise, a "clean" synthesizer, adequate dynamic range, good automatic-gain control action and other factors all work together to provide an overall index of weak-signal performance.

In these respects, the 'R71 is, overall, right up there with the very best. Indeed, in some respects the 'R71 outperforms any other model tested. As a result, it has become a favorite among radio enthusiasts concentrating on the really tough "catches."

Great Performance, Fair Audio

What to buy?

If there were an Olympics of world band receivers, the Kenwood R-5000, Japan Radio NRD-525 and ICOM IC-R71 would all be given gold medals for performance. What really separates them—aside from price, personal preference and the 'R71's unique variable bandwidth—is audio quality.

For many listening to signals that are already weak and of pedestrian fidelity, the audio quality differences among the three are beside the point. But if you also use your receiver to hear the clearer world band radio superstations, you'll either have to come to terms with the R71's audio quality, which is only fair, or to look elsewhere. For most, it's adequate. For some, it's not.

An Affordable, Well-Balanced Performer

YAESU FRG-8800

The Japanese firm of Yaesu has always had a policy of making only one model of world band radio at a time. It started in 1977 with the introduction of the FRG-7—or "Frog," as aficionados call Yaesu sets—and it continues today with the current model, the $699.95 FRG-8800.

For the active world band program listener, the '8800 makes a good choice. The standard bandwidths are reasonably adequate, the set is handy to operate, and its overall audio quality is suitable for listening to favorite programs hour-after-hour. Its design is well balanced, and the set has few drawbacks.

Varied Features

Stations are selected either by keypad entry or via a conventional tuning knob. The '8800 also has a dozen programmable channel memories for favorite stations, plus a scanner.

A digital LCD, rather than an analog meter, is used to indicate signal strength. That LCD also includes a 24-hour World Time (UTC) clock with daily on-off cycles, as well as a "sleep" switch to shut off the set after a period of anywhere up to an hour. Alas, the clock/timer's digital display is shared with the frequency readout; you can read one or the other, but not both at the same time.

Worthy Overall Performance

The '8800's dynamic range is good, as is blocking performance. Also top-drawer is the '8800's sensitivity. These measurements, taken together, help us understand why this model sifts out weaker stations with relative ease.

A major plus is the '8800's audio quality, which is above average. Perhaps because the set performs relatively well with its inboard speaker, Yaesu does not offer an optional outboard speaker.

The '8800 is particularly easy to use for what's known as "manual exalted-carrier selectable-sideband (ECSS)" reception. This useful interference-reducing technique—a less-advanced version of the synchronous detection found on Sony's ICF-2010/ICF-2001D portable—is carefully explained in the comprehensive and well-written owner's manual.

Suboptimal Bandwidths

Two bandwidths—as opposed, alas, to three on the discontinued FRG-7700 that was replaced by the '8800—are provided. Unfortunately, the 8.3 kHz "wide" bandwidth is excessively wide for reception of most world band broadcasts, while the 3.8 kHz "narrow" bandwidth is too skinny to serve as a "wide" and too broad to be a good "narrow." The '8800 thus is effectively left with only one regularly useful bandwidth. This is the only significant shortcoming of this model, although unwanted signals also sometimes pop up when they shouldn't.

Microprocessor Failures Reported

Some '8800's reportedly have had microprocessor failures, brought about by voltage "spikes" or static charges, that cause the set to operate improperly. It's an annoyance that can often be dealt with by simply removing, then reinserting, the three "AA" cells in the microprocessor. Another cure, replacing the chip, requires professional attention. Fortunately, disconnecting the set during thunderstorms and not letting the backup batteries run down should help prevent the problem from arising.

Overall, however, the FRG-8800's combination of price and performance, plus its user friendliness and good audio, make it a worthy choice for world band listening.

Britain's New Bulldog

LOWE HF-125

One of the most interesting of the new tabletop offerings is the HF-125 which is designed and manufactured not in Japan, but in Europe. The manufacturer, Lowe Electronics Limited, clearly does not fit the image of a giant electronics conglomerate. If you visit their headquarters, you won't find a sixty-story chrome and glass skyscraper filled with secretaries. There are no mile-long factories belching smoke into the air. In fact, Lowe is primarily a distributor of radio equipment tucked away in the rustic town of Matlock in Derbyshire, England.

The fact that Lowe doesn't have an office tower or a factory shouldn't be disturbing. Removed from the pressure-cooker environment of a large industrial complex, the people at Lowe have been able to think clearly about their product. Too, this compactness allows Lowe to make small production runs so the set can be improved from time-to-time. The result is a unique and quite British set.

The first thing you notice about the '125 is its sensible price: It's the lowest of any preassembled tabletop model tested.

The second thing is that it's quite compact and has few controls. There are only four knobs on the set—including the tuning knob—and five pushbuttons, plus the signal-strength meter. That's a total of only nine in all, as compared with phalanxes found on many Japanese tabletop models.

If you're wondering where the keypad is hidden, it's not. The keypad, which performs superbly, is optional and comes as an outboard device. If you want to hear, say, Radio Canada International on 5960 kHz, you just tap in 5-9-6-0, and it appears. There's no fooling around with "enter" keys, leading zeroes, decimals, or any of the other business found on most other keypads. In fact, it's made even easier to use—and handier, too—because it lies flat on the table instead of sitting vertically on the front panel.

The next thing you'll notice with the '125 is that it sounds unusually good for a communications receiver. Lab measurements show uncommonly low distortion—almost on the level of hi-fi equipment. When you hook up a good speaker to this receiver, it really does sound pleasing, even though there is some "whine" from the set's digital circuitry than can sometimes be heard faintly in the background.

Another thing that helps this set sound so good is that it comes with no less than *four* bandwidths from which to choose. Most receivers come with only two, so this is a real plus. And they work quite well, thanks to some really innovative engineering on Lowe's part. Of the four bandwidths, the widest is good for listening to local medium-wave AM stations, while the other three work nicely for world band channels.

The third unusual characteristic of the '125 becomes apparent when you take one of the covers off. This set is built more like a tank than a radio. Inside is a pair of thick, cast-aluminum side panels that look as if they could survive a nuclear blast. Other panels and covers are no less impressive in their construction, being made from heavy-gauge stamped aluminum. This is the sort of bulldog construction you find on costly professional communications receivers designed for battlefield applications . . . not a commercially available $600 receiver.

Another plus is that the front panel is protected by a sheet of plastic laminate. You'd have to work hard to scratch up this radio.

The only problem is that if you like gadgets, the '125 will be a disappointment. There is no notch filter, passband tuning, or scanner. And the frequency readout is only to the nearest kilohertz. What's ironic is that in an attempt to simplify this radio, the people at Lowe have actually complicated some things, especially if you're constantly switching modes and the like.

Those regularly tuning stations in the tropical bands won't care for the automatic gain control (AGC) decay rate in the AM mode. It's awfully slow, and there's no faster rate you can switch in. Also, the '125 isn't an ultrasensitive set. Sensitive, yes, but not like some of the Japanese supersets, such as the Kenwood R-5000. And there is a trace of digital-circuit "whine" sometimes audible in the background.

One very unusual aspect of the '125 is that you can get it with an optional synchronous detector, like you find on Sony's excellent ICF-2010/ICF-2001D portable. Alas, this is one thing Lowe didn't do well. This option is hard to operate, doesn't lock properly, and you can't even select sidebands with it. The manufacturer has indicated that its engineer is working to correct at least some aspects of it.

Another option allows the '125 to be used as a portable. We haven't been able to test this, but the manufacturer states that it consists of a rechargeable NiCad battery pack and built-in active antenna. Eventually, they'll offer a carrying case with a shoulder strap, too. This should make the compact '125 appropriate for high-quality field portable applications, especially since the radio is so rugged.

So, in all the '125 is an agreeable choice for listening to world band broadcasts. And if the construction of this tough little set is any indication, it should last a long time, too.

A Tough American-Made Receiver

TEN-TEC RX-325

Towards the very end of 1986, the American firm of Ten-Tec, located in Tennessee, introduced its first world band radio, the $699 RX-325. After a period of test-marketing in which it wasn't clear whether the '325 would be made a permanent part of the line, in late 1987 Ten-Tec went ahead with plans for regular production.

High-Quality Construction

What the RX-325 has that you don't find in most other receivers is compactness and high quality of construction. In fact, the '325 is such a small unit that you'd almost think it was meant to be a portable. As for that quality of construction, the '325 looks as though it was designed for use in Beirut. The cabinet and chassis are almost exclusively of steel and aluminium, with plastic only moderately in evidence.

Usual Array of Controls

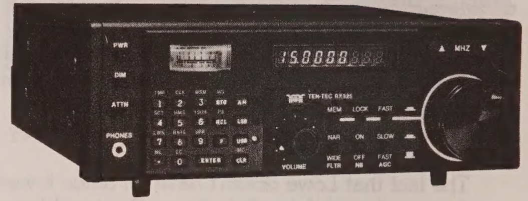
The '325 comes with the kinds of controls we've all come to expect from newly designed world band radios. Take tuning, for example. The '325 isn't tuned only by the usual knob, but also by a keypad—plus a scanner and memories to store your favorite stations. Another plus is that it's an easy set to operate. In fact, the only real problem is that the keypad is too small for comfortable day-to-day use. It also uses soft-rubber keys that have all the response of unroasted marshmallows.

There are some other ergonomic shortcomings, too—especially with the fluorescent display. But, overall, the controls are well laid out and the set is straightforward to operate. A World Time (UTC) clock is included, as well.

Reasonable Performance

The '325 performs fairly well, overall. For one thing, it's very sensitive, which is helpful if you're trying to receive some faint signal from afar.

Its audio quality has the potential of being above average, too. "Potential" because it's not anything to write home about with the set's dinky little built-in speaker, which is on the bottom of the set. Ten-Tec doesn't offer an optional external speaker, but with a good outboard speaker the sound is quite pleasant.



The real problem with this radio is that it doesn't do much else all that well. For example, for half the price of the '325 you can get a Sony ICF-2010 or ICF-2001D with synchronous detection. Synchronous detection helps in reducing interference, as well as in eliminating certain types of fading and distortion. But there is no synchronous detection on the '325. Even if you try selecting sidebands manually, the results are mediocre because some of the circuitry is drifty and the set doesn't tune closer than to the nearest 50 Hz. Also, there's no passband tuning, no notch circuit and no tone controls.

Dynamic range, front-end selectivity and certain other laboratory measurements of performance are not encouraging, either. For difficult listening situations, especially in such high-field-strength locations as Europe, the '325 is going to have some tough sledding. Even in North America you may encounter difficulties with the '325 if you live near a local FM or mediumwave AM station.

In all, the Ten-Tec RX-325 is a pleasant, easy-to-use little set with only reasonable performance. It's awfully well made—much better than nearly anything else on the market under $1,000 except the Lowe HF-125. In that respect, Ten-Tec has showed that when American manufacturers choose to do so, they can compete successfully . . . at least when it comes to quality of construction.

Antennas to Hear the World By

High-tech radios usually come equipped with foolproof little telescopic antennas that make an outdoor antenna unnecessary. But so do TV's. Yet, most of us hook up our televisions to an outdoor antenna or cable system for better reception.

World Band Portables Rarely Need Extra Antenna

The same isn't always true of world band radios, though. Nearly all portables—even the better ones—are designed to be operated off the telescopic antenna that comes with the set . . . or perhaps a bit of wire, at best. If you try to be too fancy and hook a portable up to a whiz-bang antenna, you may overload the radio's circuits. This won't damage the radio, but you could end up with a mishmash of signals . . . Radio Canada International might pop up in the middle of the wrong band, things like that. Remove the fancy antenna and, *voilà*! The radio works properly again.

But if you're using a truly excellent receiver, you need to feed it with something other than a meager diet of signals grasped from the air by a short telescopic antenna. That's why most tabletop world band receivers don't come with a built-in antenna: You don't feed table scraps to a thorobred.

The main reason for using an outboard antenna is that it can be mounted away from local electrical noises and things that might absorb radio signals before they reach your antenna. As a result, more radio signals and fewer noises work their way into your set, so you increase what's called the *signal-to-noise ratio*. More signal and less noise—those are the main things to keep in mind. A so-so antenna that's mounted where signals are strong and noises are weak will do better than a fancy antenna mounted next to a microwave oven or hidden behind thick walls.

So, Rule 1: The most important thing about an outboard antenna is where you put it. Get your antenna out into the fresh air. Best is to mount it outdoors, well away from buildings and utility lines. However, if you're in an apartment at least try to place your antenna near a window or out on the balcony—or even have it protruding inconspicuously from the building, flagpole style.

Outdoor Wire Antennas: Two Winners

In an *RDI White Paper* testing exercise running several months, we put popular outdoor wire antennas through the hoops and twists of receiving faint world band radio signals. The best were Alpha-Delta's 'Sloper" and Antenna Supermarket's "Eavesdropper." The Sloper, although longer, is a bit more versatile in that it is designed to cover even the lowest tropical bands, as well as the popular world bands. Otherwise, both perform very well.

Which brings us to Rule 2: All outdoor wire antennas should be routed through a high-quality surge protector, such as the Alpha Delta Transi-Trap or similar devices produced by the R.L. Drake Company. Keep in mind that your antenna doesn't have to suffer a direct strike for damage to occur. Such awesome energy is released by a lightning strike that serious electrical charges can be picked up some distance away. These—and similar charges from windy snow and sand storms—are more than enough to damage your receiver's sensitive solid-state innards.

Surge protectors are a bit like burglar alarms. Most people don't install them until after their first burglary, and most don't purchase a surge protector until after they've found their Pride and Joy world band radio mute following a thunderstorm. 'Nuff said.

Antennas for Apartment Dwellers

Not everyone has the room to erect an outside antenna. The Eavesdrooper is 42 feet, or 12.8 meters, long; the Sloper 60 feet, or 23 meters. So if you live on the twelfth floor of an apartment building, you'll need something a bit more discreet. One solution is something called an "active" antenna. What distinguishes an active antenna from

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Eavesdropper outdoor antenna performs very well with tabletop radios

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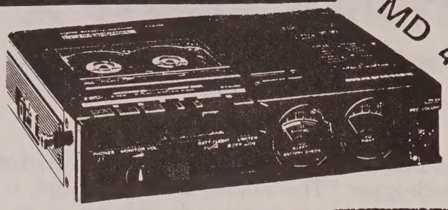
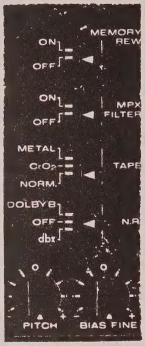
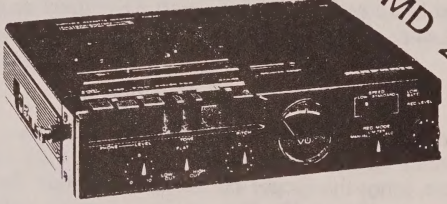


- * Stero location recording
- * Dbx noise reduction (75 db dynamic range)
- * 3 Head off the tape monitoring while recording
- * Dolby B noise reduction
- * Built-in speaker/Channel select
- * Built-in power
- * Astonishing High frequency performance
- * Illuminated VU meters
- * 3 position mic attenuation
- * Light weight/impact resistant



The PMD 430 has many useful features!

marantz PMD 221



- * Monaural location recording
- * 3 Head off-the-tape monitoring while recording
- * Direct telephone connective jack
- * 2-Speed (1-7/8 & 15/16 IPS) allows up to 2 hours of unattended recording (using C-120 tapes)
- * Built-in speaker with volume control
- * 3 position mic attenuator
- * Line IN/OUT

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Direct telephone connective jack on the PMD 221

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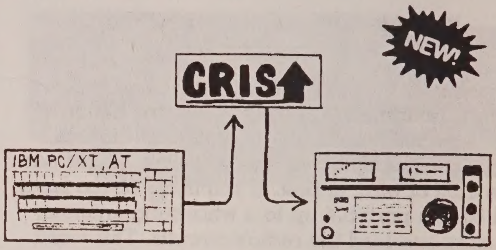

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* AUTO TRACKING: Tracks dual VFO's for splits.

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[1] Some radios may require modification.

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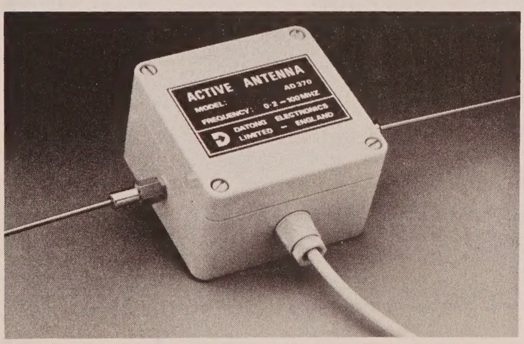
something like the Eavesdropper—or even a simple hank of wire—is amplification. An active antenna contains electronic circuitry that actually amplifies the strength of signals it receives.

Active Antennas: Midgets of the Airwaves

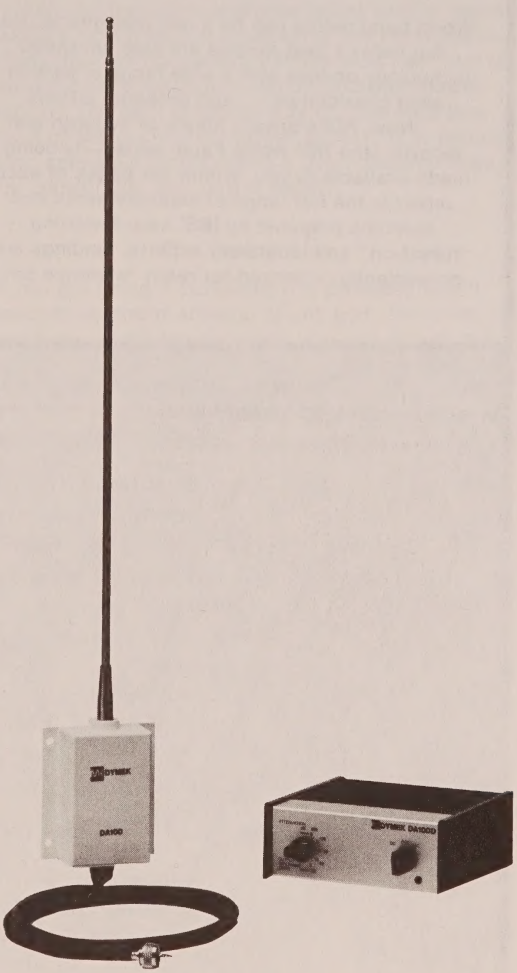
Active antennas, however, are mixed blessings. True, their smaller size allows them to be affixed to windowsills and the like, plus they're inconspicuous. So they're a favorite of apartment dwellers. The drawback is that their electrical circuitry is prone to the same foibles as any other electrical circuitry. If the antenna has a so-so circuit and you're connecting it to a superset, you're almost certain to be disappointed, because the antenna's mediocre amplifier will provide a weak link in the signal chain. Also, too much antenna amplification can strain—"overload"—most receivers . . . especially portables.

No antenna—active or otherwise—is worth its salt if its pickup wire or rod has to be mounted close to the receiver, where it will be exposed to electrical noises emanating from the receiver itself. So we restricted this year's tests of active models to those having separate pickup and control modules. These allow signals to be picked up well away from the receiver, so the signal-to-noise ratio tends to be improved.

Our tests of five leading active world band antennas indicates that whether any given model will succeed depends on the specific conditions you face. For example, the Palomar PA-351 contains a special filter to help keep local medium-



Datong's well-built AD370 active antenna, suitable for use outdoors



Dymek DA100D active antenna can be weatherproofed for use on the high seas

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RDI Evaluates the Lowe HF-125 Receiver
RDI Evaluates the Sony ICF-2010/ICF-2001D Receiver
RDI Evaluates the Ten-Tec RX325 Receiver
RDI Evaluates the Yaesu FRG-8800 Receiver
RDI Evaluates Popular Outdoor Antennas
How to Interpret Receiver Specifications and Lab Tests

The following reports are in process and will be available in the very near future:

RDI Evaluates Popular Indoor Antennas
RDI Evaluates the Grundig Satellit 400 Receiver
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wave AM stations from intruding into the world radio bands. This makes it an obvious candidate for use in urban areas or by those living near mediumwave AM stations. On the other hand, the Grove Power Ant III—by itself, more a preamplifier than an active antenna, as you have to purchase separate antenna components—lacks such a filter and has uninspiring dynamic range, to boot. This makes it a dubious choice for use in urban locations. But it's quiet at full gain, which allows it to be considered for use with high-quality receivers in outlying areas where mediumwave AM signals are weak.

The Datong AD270—for indoors—and AD370—for outdoors—are the most balanced performers. Their amplification is strong without being excessive, dynamic range is impressive, and they're reasonably quiet. However, they have no filter to reject local stations. If you live near local mediumwave AM stations, this could make the Palomar a better choice.

The MFJ-1024 has the best dynamic range of the group. This, plus its moderate level of amplification, means that it is the least likely to cause "overloading" within either your antenna or radio. However, both it and the Dymek, although not really noisy, are also the least quiet models tested—a consideration if you own a particularly "hiss" free receiver.

The Dymek DA100D performs similarly to the MFJ unit, except that the Dymek's amplification rises with frequency, whereas that of the MFJ falls. Regular listeners to the tropical bands thus will prefer the MFJ. However, listeners to the popular international world bands should lean to the Dymek—especially if they tune around during the daytime, when the higher bands are most active.

Finally, one disappointing finding is that virtually all the active antennas tested tend to cause audible hum from the speakers of the receivers to which they are connected. For the most part, this is caused by the antenna's own outboard ac power supply. The only practical way to cope with this, short of using a battery power supply, is to mount your antenna's pickup head a good distance from the control box and power supply.

The Bottom Line

If you are using a portable, you probably won't need an outboard antenna of any sort. However, if you have a tabletop receiver, you will almost certainly need one. The best choice, if it's feasible, is a passive antenna, such as the "Sloper" or "Eavesdropper." Otherwise, choose the most suitable active antenna based on the conditions at your location.

Outdoor antennas can have unexpected consequences. At twilight, a hot-air balloon becomes entangled in antenna at **Passport's** monitoring site in Pennsylvania

"The Best Results throughout the Shortwave Spectrum."

—Larry Magne, Radio Database International
White Paper

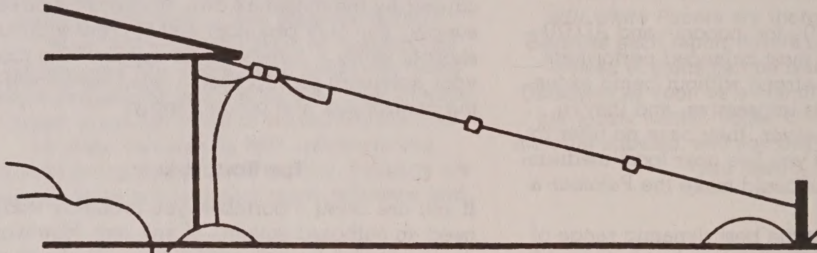

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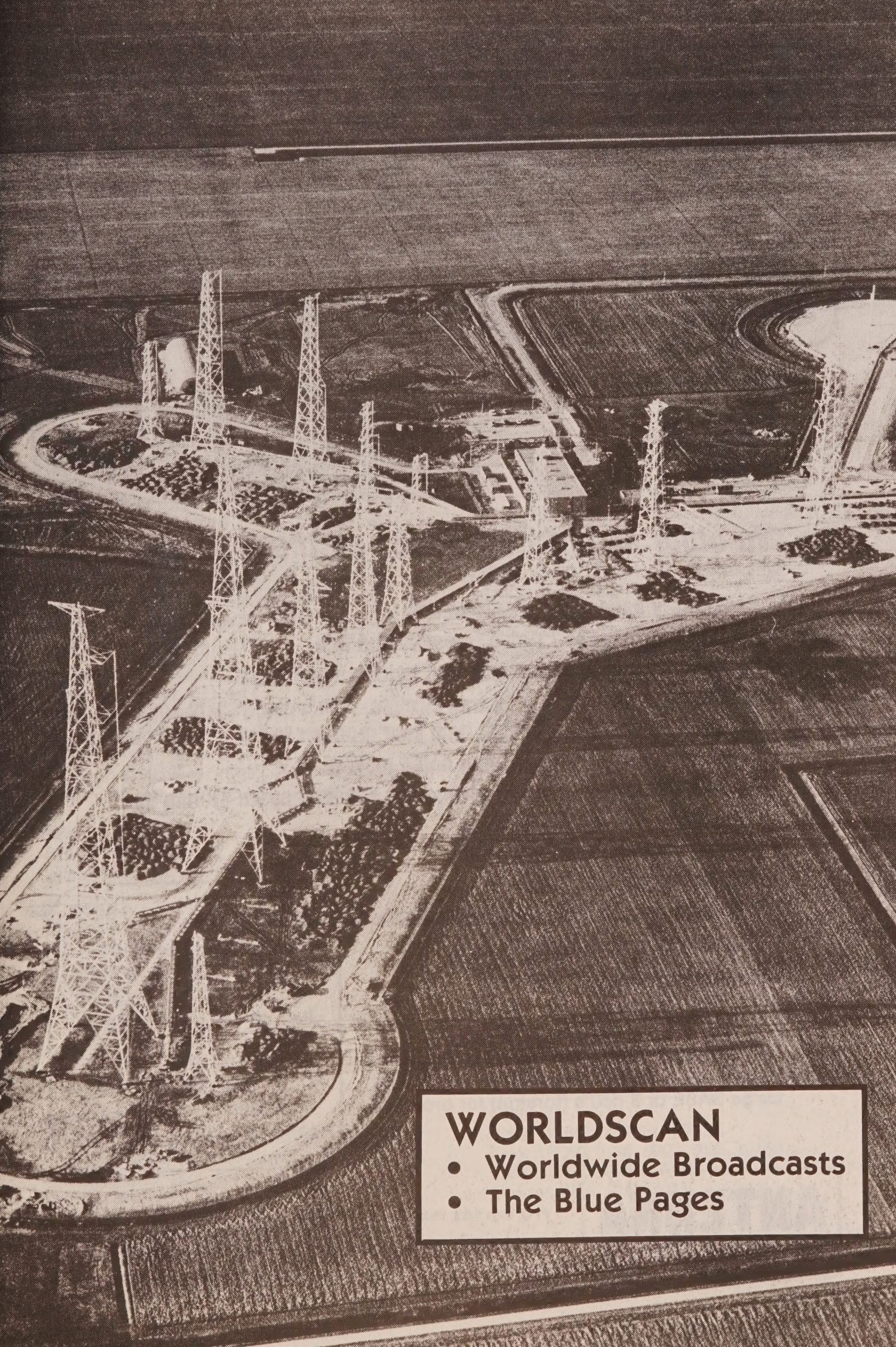
Photo page 113: Radio Nederland, like many world band broadcasters, uses directional antennas to improve signal strength.

Courtesy Radio Nederland



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You can tune in world band radio broadcasts in either of two ways: by country or by channel.

This quick-access "Worldwide Broadcasts" section tells you right away the best channels to hear in English, French, German, Japanese and Spanish from each country. It's perfect for getting right to the station you want.

Readers tell us that they also especially enjoy "traveling" around the bands . . . dialing about to discover what they like to hear, rather than simply tuning directly to a given country. The at-a-glance "Worldscan" section within the blue pages of this book allows you to do just that. It also includes a wealth of details, including time and target zone, for every station on the air.

Channels in **bold** type often come in best, as they are from special relay transmission facilities located near the countries where the broadcasts are intended to be heard.

AFGHANISTAN
RADIO AFGHANISTAN
English 9635 kHz

ALBANIA
RADIO TIRANA
English 6200, 7065, 7075, 7080, 7120, 7205,9480, 9500, 9760, 11835, 11855, 11960, 11985, 15185 kHz
French 6170, 7075, 7080, 7120, 7135, 7165, 7205, 9480, 9500, 11855, 11905, 11960 kHz
German 6080, 7310, 9375, 11985 kHz
Spanish 6200, 7300, 9430, 9500, 9750, 9760, 11985 kHz

ALGERIA
"VOICE OF FREE SAHARA"
Multilingual **9640**, **15215** kHz
RTV ALGERIENNE
English 9509, 9640, 15215, 17745 kHz
French 9509, 9640, 15160, 15215, 17745 kHz
Spanish 9509, 9640, 15160, 15215 kHz

ANGOLA
RADIO NACIONAL
Multilingual 7245, 9535, 9720, 11955 kHz

ARGENTINA
RADIO ARGENTINA—RAE
English 9690, 11710, 15345 kHz
French 15345 kHz
German 15345 kHz
Portuguese 9690, 11710 kHz
Spanish 6060, 9690, 11710, 15345 kHz
Japanese 11710 kHz
RADIO NACIONAL
Spanish 6060, 9690 kHz

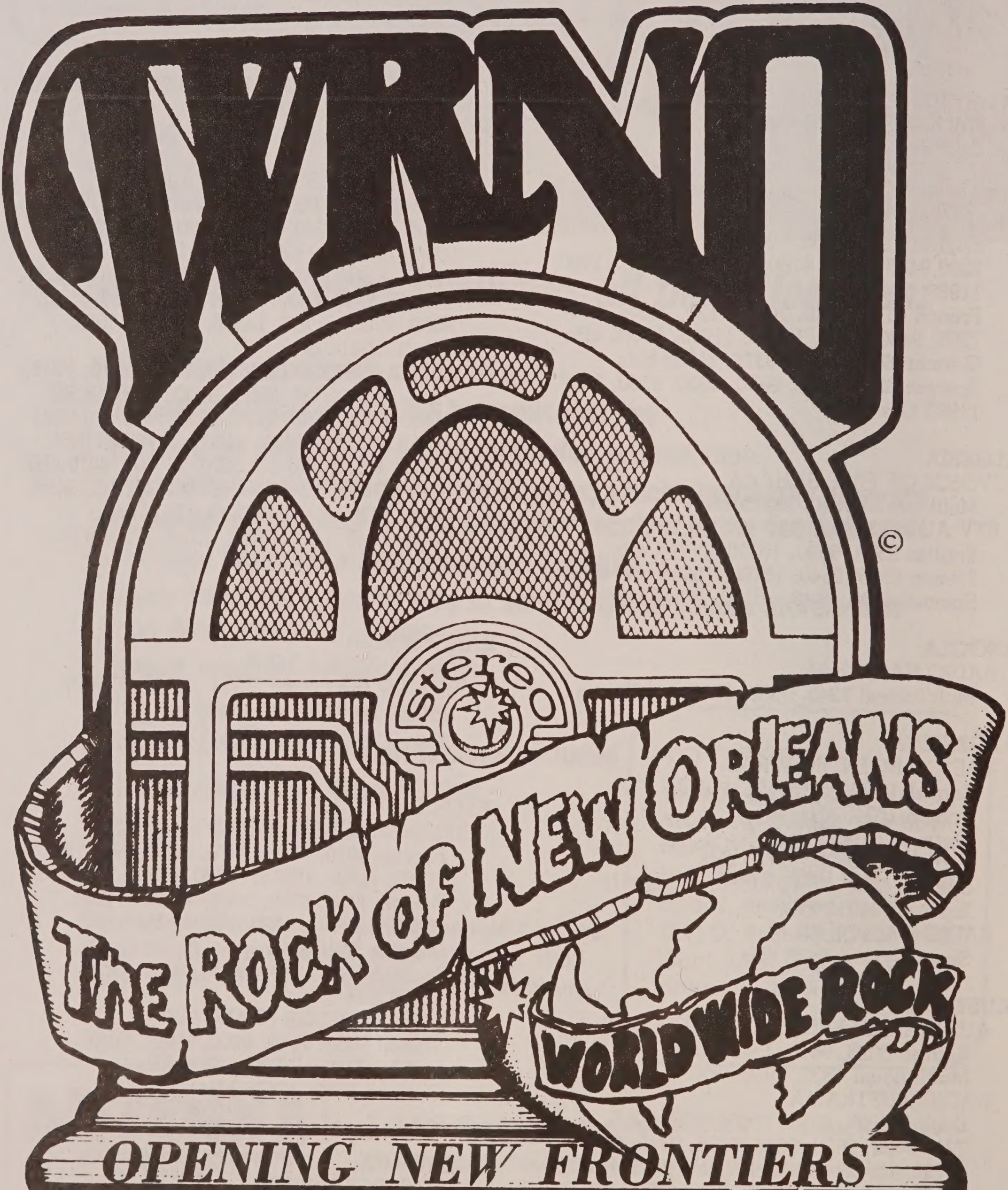
AUSTRALIA
AUSTRALIAN BROADCASTING CORP
English 5025, 9610, 15425 kHz
Multilingual 4835, 4910 kHz
RADIO AUSTRALIA
English 5995, 6035, 6060, 6080, 7205, 7215,9580, 9620, 9645, 9655, 9710, 9770, 11705, 11720, 11800, 11910, 11945, 15140, 15160, 15180, 15240, 15315, 15320, 15395, 15415,17715, 17750, 17795 kHz
French 11945, 15160, 15315, 15320, 15395 kHz
Japanese 9710, 11800 kHz

AUSTRIA
RADIO AUSTRIA INTERNATIONAL
English 5945, 6000, 6155, 7115, 7210, 7245, 7260, 9550, 9585, 9600, 9620, 9635, 9685, 9725, 11760, 11805, 11825, 11830, 11840, 11855, 11915, 11920, 12015, 15320, 15410 kHz
French 5945, 6000, 6155, 7115, 7260, 9550, 9600, 9725, 11760, 11805, 11830, 11920, 12015, 15410 kHz
German 5945, 6000, 6155, 7115, 7210, 7245, 7260, 9550, 9580, 9585, 9600, 9620, 9635, 9655, 9660, 9685, 9720, 9725, 11660, 11720, 11760, 11805, 11825, 11830, 11840, 11855, 11915, 11920, 12015, 15270, 15320, 15410 kHz
Spanish 5945, 6000, 6155, 9580, 9585, 9655, 9660, 9720, 11660, 11720, 12015 kHz
Other 5945, 6000, 6155, 7210, 9600, 9635, 9685, 11915, 15410 kHz

BANGLADESH
RADIO BANGLADESH
English 4880, 6240, 7505, 11645, 12030, 15525, 17653 kHz
Multilingual 4880, 4890, 6195 kHz

BELGIUM
BELGISCHE RADIO & TV
English 5910, 9790, 9830, 9880, 9905, 9925, 11695, 11985, 15515, 15580, 15590, 17595 kHz
French 5910, 6035, 9905, 11695, 11985, 15515, 15580, 15590, 17595 kHz
German 5910 kHz
Spanish 5910, 9790, 9830, 9905, 9925, 11985 kHz
RADIO TV BELGE FRANCAISE
French 6050, 7140, 9900, 9925, 11660, 11855, 15540, 17580, 17675 kHz
German 7140, 17675 kHz

BOTSWANA
RADIO BOTSWANA
Multilingual 4820, 5955, 7255 kHz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World Wide Rock
OPENING NEW FRONTIERS

BRAZIL

- RADIO NACIONAL
  - English 11745, 15265, 15335 kHz
  - French 11765 kHz
  - German 15265, 15335 kHz
  - Spanish 9655, 11745 kHz

BULGARIA

- RADIO SOFIA
  - English 6070, 7115, 7155, 7280, 9560, 9595, 9700, 9740, 11720, 11735, 11750, 11765, 11835, 11840, 15140, 15310, 15330 kHz
  - French 6070, 7155, 7280, 9560, 9595, 9700, 9740, 11720, 11735, 11765, 11835, 11840, 15140, 15310 kHz
  - German 6035, 6070, 7155, 9700, 11720, 15140 kHz
  - Spanish 6115, 9560, 9745, 9750, 9755, 11710, 11765, 11840, 11860, 11870, 15370 kHz

BURKINA FASO

- RTV BURKINA
  - English 7230 kHz
  - French 4815, 7230 kHz
  - Multilingual 4815, 7230, 9515 kHz

BURMA

- BURMA BROADCASTING SERVICE
  - English 5985, 7185, 9730 kHz

CAMEROON

- RADIO CAMEROON
  - French 4795 kHz
  - Multilingual 4795, 4850, 5010, 7150, 7240, 9746 kHz

CANADA

- CANADIAN BROADCASTING CORP
  - English 6065, 6195, 9625, 11720 kHz
  - French 6065, 6195, 9625, 11720 kHz
  - Multilingual 6195, 9625, 11720 kHz
- RADIO CANADA INTERNATIONAL
  - English 5960, **5995**, **6050**, 6140, **7130**, **7155**, **7185**, **7235**, **7295**, 9535, **9555**, 9625, **9740**, 9750, 9755, 9760, 11710, **11775**, 11790, **11840**, 11845, **11915**, **11935**, 11940, 11945, 11955, 11960, 15140, 15150, **15160**, **15180**, **15235**, 15260, 15325, 15440, 17820, 17875 kHz
  - French 5960, **5995**, **6050**, 6140, **7130**, **7155**, **7185**, **7230**, **7235**, **7295**, 9535, **9555**, 9650, **9740**, 9750, 9755, 9760, 11710, **11775**, **11840**, 11845, **11915**, **11935**, 11940, 11945, 11960, 15140, 15150, **15160**, **15180**, **15235**, 15260, 15325, 15440, 17820, 17875 kHz
  - German **5995**, **7235**, 15325, 17820 kHz
  - Spanish 9535, 11845, 11940 kHz
  - Japanese **3925**, **6055**, **9595** kHz

CENTRAL AFRICAN REPUBLIC

- RTV CENTRAFRICAINE
  - Multilingual 5035 kHz

CHAD

- RADIODIFFUSION NATIONALE
  - Multilingual 4904, 7120 kHz

CHILE

- RADIO SISTEMA NACIONAL
  - Spanish 15140 kHz

CHINA (PR)

- NEI MONGOL PEOPLE'S BS
  - Chinese 7105, 9750 kHz
  - Other 6974 kHz
- RADIO BEIJING
  - English 4130, 4200, 5250, 6825, 7480, 9440, 9535, 9550, 9570, 9645, 9700, 9730, 9860, 11755, 11860, 11905, 11980, 15165, 15280, 15440, 15445 kHz
  - French 4020, 7055, 7185, 7800, 9880 kHz
  - German 4130, 5250, 9860 kHz
  - Spanish 7375, 9570, 9590, 9645, 9860, 9945, 11445, 11650, 11685, 11695, 11980, 15100, 15120, 15180, 15200, 15445, 17650, 17680 kHz
  - Japanese 4960, 7295, 7480 kHz

CHINA (TAIWAN)

- VOICE OF FREE CHINA
  - English **5985**, **6155**, 7445, **9555**, **9680**, 9685, 9955, **11740**, 15345.2, 15370, **15440**, **17845** kHz
  - French 9765, **11805**, 15370, **15440**, **17845** kHz
  - German 9765, 9845, **11805**, **15440**, **17845** kHz
  - Spanish **9555**, 9765, 9955, **11740**, **11855**, **11885**, **15130**, **15215**, **17805**, **17845** kHz
  - Japanese 7130, 15345.2 kHz
- VOICE OF ASIA
  - English 7285, 7445 kHz

COLOMBIA

- RADIO SUTATENZA
  - Spanish 5095 kHz

CONGO

- RTV CONGOLAISE
  - French 6115, 9715 kHz
  - Multilingual 6115, 9715 kHz

COSTA RICA

- FARO DEL CARIBE
  - Spanish 9645 kHz

CUBA

- RADIO HABANA
  - English 6090, 6120, 6140, **6165**, 9525, **9695**, 9740, 11725, 11795, 15300 kHz
  - French **6165**, **7165**, **9695**, **9730**, **11755**, 11795, 11950, **17705** kHz
  - Spanish 6060, 6090, 9550, **9695**, **9720**, **9730**, 9770, 11725, 11760, 11815, 11950, 11970, **15230**, 15300, **17705** kHz

CZECHOSLOVAKIA
RADIO PRAGUE
English 5930, 6015, 6055, 7290, 7345, 9605, 9630, 9740, 11855, 11990, 13715, 15110, 15155, 17730, 17840, 21505, 21705 kHz
French 5930, 6055, 7290, 7345, 9505, 9600, 11990, 13715 kHz
German 6055 kHz
Spanish 5930, 6015, 6055, 7345, 9630, 9740, 11990 kHz
Multilingual 6055, 7345, 9505, 9630 kHz

DOMINICAN REPUBLIC
RADIO CLARIN
Spanish 11700 kHz

ECUADOR
HCJB—VOICE OF THE ANDES
English 6075, 6130, 6205, 6230, 9745, 9845, 9860, 9870, 11740, 11910, 11925, 15115, 15155, 15270, 17790, 17890 kHz
French 9860, 11740, 11835, 11910, 15155, 15220, 15270, 17790 kHz
German 6075, 6205, 9715, 9845, 9860, 11740, 11835, 15250, 15270, 17790 kHz
Spanish 6050, 9765, 9860, 11835, 11910, 11960, 15160, 15270, 17790, 17890 kHz
Japanese 6075, 9715, 11835, 15295 kHz
RADIO NACIONAL
Spanish 15270, 17790 kHz

EGYPT
RADIO CAIRO
English 9475, 9655, 9675, 15255, 15375, 17675 kHz
French 9900, 15335 kHz
German 9900 kHz
Spanish 9475, 9740, 11715 kHz

EQUATORIAL GUINEA
RADIO NACIONAL
English 9553 kHz
Multilingual 4925.6 kHz

ETHIOPIA
"RADIO FREEDOM"
Multilingual 9595 kHz
"VOICE OF NAMIBIA"
Multilingual 9595 kHz
VOICE OF REVOLUTIONARY ETHIOPIA
English 9560 kHz
French 9560 kHz

FINLAND
RADIO FINLAND
English 6120, 9560, 9605, 9610, 9655, 11715, 11755, 11850, 11935, 11945, 15185, 15245, 15400 kHz
French 6120, 9610, 11755, 11850, 11945, 15185, 15400 kHz
German 6120, 9610, 11755 kHz

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FRANCE
RADIO FRANCE INTERNATIONAL
English **4890**, **5990**, 6045, **6055**, 6115, 6175, 7135, 7235, 7280, 9535, 9550, 9715, 9790, **9800**, 11700, 11705, 11805, 11995, 15315, 17620, 17795 kHz
French **4890**, 5950, **5990**, 5995, 6045, **6055**, 6115, 6175, 7120, **7135**, 7160, 7235, 7280, 9535, 9550, 9575, 9605, 9715, 9745, **9790**, **9800**, 9805, 9810, **11670**, 11690, **11700**, 11705, 11790, 11800, 11805, 11845, 11930, 11955, 11965, **11995**, 15135, 15155, 15180, 15190, 15195, **15300**, 15315, 15365, 15425, **15435**, 15460, 17620, **17720**, 17785, 17795, 17800, 17845, 17850, **17860**, 21620 kHz
German 6150, 7145 kHz
Spanish 5950, 5995, 6040, **6055**, **6175**, 9715, **9790**, **9800**, **11670**, **11700**, 11965, **11995**, **15200**, **15435** kHz
Multilingual **9790**, 9805, 11670, 11690, **11700**,

GABON
ADVENTIST WORLD RADIO
French 9630 kHz
AFRIQUE NUMERO UN
French 4830, 7200, 11940, 15200, 15475, 17870 kHz
Multilingual 7200, 15200, 15475 kHz
RTV GABONAISE
Multilingual 4777, 7270 kHz

GERMANY (DR)
RADIO BERLIN INTERNATIONAL
English 5965, 6010, 6040, 6070, 6080, 6115, 6125, 6165, 7185, 7260, 7295, 9505, 9560, 9620, 9665, 9730, 11705, 11750, 11785, 11795, 11810, 11890, 11920, 11970, 15145, 15170, 15240, 15255, 15440, 15445, 17705, 17755, 17880, 21465, 21540 kHz
French 5965, 6040, 6115, 7170, 7185, 7260, 7295, 9505, 9620, 9665, 9730, 11750, 11785, 11810, 11890, 11970, 15145, 15170, 15255, 17755, 21465 kHz
German 5965, 6010, 6040, 6070, 6080, 6105, 6115, 6125, 7105, 7170, 7185, 7295, 9505, 9560, 9600, 9620, 9645, 9665, 9730, 9770, 11705, 11750, 11785, 11795, 11810, 11890, 11920, 15170, 15240, 17705, 17755, 17880, 21465, 21540 kHz
Spanish 6010, 6040, 6070, 6125, 6165, 7185, 7260, 7295, 9505, 9600, 9620, 9645, 9665, 9730, 11750, 11785 kHz
STIMME DER DDR
German 6115 kHz

GERMANY (FR)
BAYERISCHER RUNDFUNK
German 6085 kHz
DEUTSCHE WELLE
English 5960, **5995**, 6010, 6035, **6040**, **6085**, **6120**, 6130, 6145, **6170**, **6185**, 7110, 7130, 7150, 7195, **7200**, **7225**, 7285, **9545**, **9565**, 9585, **9600**, 9610, **9615**, 9625, **9640**, **9650**, **9690**, **9700**, **9735**, 9745, 9765, 11765, **11785**, **11945**, **15105**, 15135, 15160, 15185, 15205, 15320, 15330, **15410**, 17765, 17780, **17800**, 17825, **21560**, 21600, 21680 kHz
French 7150, 7195, **7225**, **9565**, 9610, 9625, 9700, **9735**, 9765, 11765, 11945, 15135, 15185, **15410**, 17765, **17800**, 17825, 21600 kHz
German 3995, 6040, **6045**, **6065**, 6075, **6085**, 6100, 6145, **6160**, 7130, 7145, 7175, **7225**, 7285, **9545**, 9570, **9605**, 9615, **9640**, 9645, 9650, **9690**, 9700, 9715, **9735**, **11705**, **11730**, **11765**, **11785**, **11795**, 11820, 11855, **11945**, 11955, **15105**, **15210**, **15245**, 15260, **15270**, **15275**, 15320, **15355**, **15410**, **17715**, **17810**, 17845, **17860**, **17875**, 21560, **21680** kHz
Spanish 6010, 6045, 6120, 6130, 6145, 7235, **9545**, **9565**, **9605**, **9690**, 9700, **9735**, **11705**, **11785**, **11795**, 11810, **11865**, **15105**, **15205** kHz
Japanese **7170**, **7265**, **9505**, **9640**, 9670, 9680, 11810, **11845**, **11865**, 15185, 15400 kHz
RADIO IN THE AMERICAN SECTOR
German 6005 kHz

GHANA
GHANA BROADCASTING CORP
English 7295 kHz
Multilingual 4915 kHz
RADIO GHANA
English 6130 kHz
French 6130 kHz

GREECE
FONI TIS HELLADAS
English 7430, 9395, 9420, 9425, 9855, 11615, 11645, 15630, 17565 kHz
Spanish 9395, 9420 kHz
Multilingual 7430, 9395, 9425 kHz

GUAM
ADVENTIST WORLD RADIO
English 9830, 11980 kHz
Japanese 11965 kHz
KTWR—TRANS WORLD RADIO
English 9840, 11715, 11840 kHz
Japanese 9675, 9820, 11840 kHz

GUINEA
RTV GUINEENNE
Multilingual 7125, 9650, 15310 kHz

HOLLAND
RADIO NEDERLAND
English 5955, **6020**, **6165**, 7175, **9515**, **9540**, **9590**, **9630**, **9650**, **9715**, 9895, **11735**, 11740, 11930, 13770, 15560, **15570**, **17575**, **17605**, **21480**, **21485**, **21685** kHz
French **9540**, 9840, 9895, 11730, **11740**, 15280, 15560, **17605**, **21685** kHz
Spanish 6020, 6110, **6165**, **9590**, 9610, 9895, **11715**, 11930, **15315**, **17605** kHz

HUNGARY

RADIO BUDAPEST
English 6025, 6110, 7220, 7225, 9520, 9585, 9835, 11910, 15220, 17710 kHz
German 7220, 7225, 9585, 9835, 11910 kHz
Spanish 6025, 6110, 7225, 9520, 9585, 9835, 11910 kHz

INDIA

ALL INDIA RADIO
English 6035, 7150, 7215, 9545, 9550, 9595, 9665, 9755, 9910, 11620, 11715, 11765, 11795, 11810, 11845, 11865, 11870, 15110, 15130, 15175, 15230, 15320, 15335, 17387, 17705, 17875 kHz
French 9755, 11865, 15365, 17830 kHz
Multilingual 6045, 6050, 6160, 7110, 7160, 7280, 9545, 9610, 9615, 9675, 10335, 11620, 11730, 11815, 11830, 11850, 11895, 15160, 15245, 15250, 15305, 15320, 17705 kHz

INDONESIA

VOICE OF INDONESIA
English 11788, 15150 kHz
French 11788, 15150 kHz
German 11788, 15150 kHz
Spanish 11788, 15150 kHz
Japanese 11788, 15150 kHz

IRAN

VOICE OF THE ISLAMIC REP
English 7215, 9022, 9765, 9770, 11790, 11930 kHz
French 9022, 9575, 9765, 9770, 11930, 15084 kHz
German 9022, 9765, 9770, 11930 kHz
Spanish 9022, 9575, 15084 kHz

IRAQ

RADIO BAGHDAD
English 6195, 9875, 11705 kHz
French 9875 kHz
German 9875 kHz

ISRAEL

KOL ISRAEL—VOICE OF ISRAEL
English 5885, 7410, 7464, 9012, 9385, 9435, 9815, 9855, 9860, 11585, 11610, 11655, 12080, 15095, 15485, 15640, 15650, 17620, 17630 kHz
French 5885, 7410, 7464, 9012, 9385, 9435, 9815, 9855, 9860, 11585, 11610, 11655, 12080, 15095, 15485, 15640, 15650, 17620, 17630 kHz
Spanish 5885, 7410, 7464, 9012, 9435, 9815, 9855, 9860, 11585, 11610, 11655, 12080 kHz

ITALY

RTV ITALIANA
English 5990, 6165, 7235, 7275, 7290, 9575, 9710, 9775, 11800, 11905, 15330 kHz
French 5990, 7235, 7290, 9575, 9710, 11800, 11905 kHz
German 5990, 7275, 7290, 9575 kHz
Spanish 5990, 7275, 9575, 9710, 11800, 11905, 15245 kHz
Multilingual 6060 kHz

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IVORY COAST
RTV IVOIRIENNE
English 11920 kHz
French 4940, 6015, 11920 kHz

JAPAN
NIHON SHORTWAVE BROADCASTING
Japanese 3925, 6055, 6115, 9595, 9760 kHz
RADIO JAPAN/NHK
English **5960**, 5965, 5990, 5995, **6120**, 7105, 7140, 7240, 7280, 9505, 9525, **9645**, 9695, 9725, 11840, 11875, 11950, 11955, 15195, **15230**, 15235, 15350, **17785**, 17810, 17845, **21625** kHz
French 5965, 6070, 7105, 7180, **9570**, 11955 kHz
German 6070, 7105, 7180, **9570**, 11955 kHz
Spanish 5990, 6065, 9525, 9725, 11950, 15195 kHz
Japanese **5960**, 5965, 5990, 5995, 6065, **6120**, 7140, 7240, 7280, 9505, 9525, **9645**, 9695, 9725, 11840, 11950, 11955, 15195, **15230**, 15235, 15350, 17755, **17785**, 17810, 17845, **21625** kHz

JORDAN
RADIO JORDAN
English 9560 kHz

KAMPUCHEA (CAMBODIA)
VOICE OF THE PEOPLE
English 11937.7 kHz
French 11937.7 kHz

KENYA
VOICE OF KENYA
English 6045, 6100, 7270 kHz

KOREA (DPR)
RADIO PYONGYANG
English 6576, 7290, 9325, 9530, 9600, 9650, 9715, 9940, 9977, 11735, 11830, 13650, 13750, 15120, 15140, 15160, 15180, 15340 kHz
French 6576, 7290, 9325, 9530, 9600, 9940, 9977, 11735, 11830, 13750, 15340 kHz
German 6576, 7290, 9325 kHz
Spanish 6576, 7290, 9325, 9600, 9777, 11735, 13650, 15120, 15140, 15160 kHz
Japanese 6540, 9505, 11780 kHz

KOREA (REPUBLIC)
RADIO KOREA
English 5975, 6060, 6480, 7275, 7550, 9570, 9640, 9750, 9870, 11740, 13670, 15375, 15395, 15575 kHz
French 5975, 6480, 7275, 7550, 9515, 9870, 13670, 15575 kHz
German 6480, 7275, 7550, 9515, 9870, 13670, 15575 kHz
Spanish 6480, 7550, 9570, 9870, 11725, 13670, 15575 kHz
Japanese 5975, 6165, 7275, 9640 kHz

KUWAIT
RADIO KUWAIT
English 11675, 15345 kHz

LAOS
LAO NATIONAL RADIO
French **11870**, **11960**, **15190**, **15420** kHz

LESOTHO
RADIO LESOTHO
Multilingual 4800 kHz

LIBERIA
LIBERIAN BROADCASTING SYSTEM
Multilingual 6090 kHz
RADIO ELWA
English 11830 kHz
French 6070, 9550, 11830 kHz

LIBYA
RADIO JAMAHIRIYA
English 11815, 15450 kHz

LUXEMBOURG
RADIO LUXEMBOURG
English 6090 kHz
German 6090 kHz

MADAGASCAR
RADIO MADAGASIKARA
Multilingual 6135 kHz
RADIO MADAGASIKARA
French 5010 kHz
Multilingual 5010 kHz

MALAWI
MALAWI BROADCASTING CORP
Multilingual 5995 kHz

MALAYSIA
RADIO MALAYSIA
English 7295, 9665 kHz
Multilingual 7295, 9665 kHz
VOICE OF MALAYSIA
English 6175, 9750, 15295 kHz

MALI
RTV MALIENNE
Multilingual 5995, 7285, 9635, 11960 kHz

MALTA
RADIO MEDITERRANEAN
English 6110 kHz
French 6110 kHz

MAURITANIA
ORT DE MAURITANIE
Multilingual 4845, 7245 kHz

MEXICO
RADIO MEXICO INTERNATIONAL
Spanish 15430 kHz

MONACO
TRANS WORLD RADIO
English 7105, 7205 kHz
French 5945 kHz
German 6230, 7205 kHz
Multilingual 7205 kHz

MONGOLIA
RADIO ULAN BATOR
English 7235, 9575, 9595, 9616, 12015, 15305 kHz
French 9677, 11790 kHz

MOROCCO
RADIO MEDI UN
Multilingual 9575 kHz

MOZAMBIQUE
RADIO MOCAMBIQUE
English 9525, 11818, 11835 kHz

NAMIBIA
SOUTHWEST AFRICA BC CORP
Multilingual 4965 kHz

NEPAL
RADIO NEPAL
English 5005 kHz

NETHERLANDS ANTILLES
TRANS WORLD RADIO
English 9535, 11815 kHz
German 9535, 15355 kHz
Spanish 6180, 9535, 9665, 15355, 15385 kHz

NICARAGUA
LA VOZ DE NICARAGUA
English 6015 kHz
Spanish 6015, 6100 kHz

NIGER
LA VOIX DU SAHEL
English 5020 kHz
French 5020, 6060, 7155, 9705 kHz
Multilingual 5020, 6060, 7155, 9705 kHz

NIGERIA
FEDERAL RADIO CORP
Multilingual 6050 kHz
RADIO NIGERIA
English 4931.8 kHz
Multilingual 4770, 4990, 6089, 7285 kHz
VOICE OF NIGERIA
English 7255, 11770, 15120, 15185 kHz
French 7255, 15120 kHz
German 15120 kHz

NORTHERN MARIANA IS
KFBS—FAR EAST BC
Japanese 11930 kHz
Multilingual 9545, 9685 kHz
KYOI
Multilingual 9465, 9670, 11900, 15405, 17775, 17780 kHz

NORWAY
RADIO NORWAY INTERNATIONAL
English 6015, 6040, 7125, 7235, 7255, 7265, 9525, 9530, 9580, 9590, 9605, 9650, 9655, 11735, 11850, 11865, 11870, 11925, 11930, 15165, 15175, 15180, 15185, 15230, 15250, 15300, 15310, 15315, 17770, 17840 kHz
Multilingual 6015, 6040, 7125, 7235, 7255, 7265, 9525, 9530, 9580, 9590, 9605, 9650, 9655, 11735, 11850, 11865, 11870, 11925, 11930, 15165, 15175, 15180, 15185, 15230, 15250, 15300, 15310, 15315, 17770, 17840 kHz

PAKISTAN
RADIO PAKISTAN
English 7315, 9465, 9885, 11675, 11740, 15114, 15595, 15605, 17660 kHz
French 9465, 11635 kHz
Multilingual 15605, 17660 kHz

PARAGUAY
RADIO NACIONAL
Spanish 9735 kHz
Multilingual 9735 kHz

PHILIPPINES
FAR EAST BROADCASTING CO
English 9510, 11850, 15350, 15445 kHz
RADIO VERITAS ASIA
English 9710, 15135, 15215, 15270 kHz
Japanese 7190, 9505, 9730, 15275 kHz

POLAND
RADIO POLONIA
English 6095, 6135, 7125, 7145, 7270, 7285, 9525, 9540, 9675, 11815, 11840, 15120 kHz
French 6095, 6135, 7125, 7270, 7285, 9525, 9540, 9675, 11840, 15120 kHz
German 6095, 6135, 7125, 7270, 7285, 9540 kHz
Spanish 6135, 7145, 7270, 9525, 9675, 11840, 15120 kHz
Multilingual 6135, 7125, 7145, 7270 kHz

PORTUGAL
ADVENTIST WORLD RADIO
English 9670 kHz
German 9670 kHz
RADIO PORTUGUESA
English 6100, 9565, 9605, 9680, 9705, 9740, 11915, 15105, 15250 kHz
French 6100, 9605, 9740, 11915, 15250 kHz
German 6100, 9605, 9740 kHz

ROMANIA
RADIO BUCHAREST
English 5990, 6055, 6155, 7105, 7135, 7145,

7195, 9510, 9530, 9570, 9640, 9685, 9690, 9750, 11740, 11775, 11790, 11810, 11830, 11840, 11940, 15250, 15270, 15335, 15340, 15380, 17720, 17790, 17805, 21665 kHz
French 5990, 6105, 7105, 7195, 7225, 9690, 11775, 11790, 11810, 11885, 11940, 15250, 15335, 15365, 15380, 17720 kHz
German 5990, 6105, 6150, 6190, 7195, 7235, 9690, 11940, 15250 kHz
Spanish 5990, 6150, 6155, 6190, 7225, 9510, 9570, 11790, 11810, 11940 kHz

RWANDA
RADIO REPUBLIQUE RWANDAISE
Multilingual 6055 kHz

SAUDI ARABIA
BC SERVICE OF THE KINGDOM
English 9705, 9720 kHz
French 9705, 9720 kHz

SENEGAL
ORT DU SENEGAL
Multilingual 4890, 7173 kHz

SEYCHELLES
FAR EAST BROADCASTING ASS'N
English 9590, 11865, 15120, 15325, 17795 kHz
French 11900 kHz

SINGAPORE
SINGAPORE BROADCASTING CORP
English 5010, 5052, 11940 kHz

SOMALIA
RADIO MOGADISHU
English 6095 kHz
French 6095 kHz
Multilingual 7200 kHz

SOUTH AFRICA
RADIO RSA
English 4990, 5980, 6010, 6120, 7270, 7295, 9585, 9615, 9695, 11900, 15185, 15220, 15245, 17705, 17780, 21590 kHz
French 5980, 7270, 9585, 9615, 9675, 11810, 11900, 15185, 15220, 15245, 17780, 21590 kHz
German 11900, 15185, 15240, 17790, 17850 kHz
Spanish 6065, 6140, 6160, 9540, 9580 kHz
SOUTH AFRICAN BROADCASTING CORP
English 4880, 9665 kHz
Multilingual 3955, 4880, 6105 kHz

SPAIN
RADIO EXTERIOR DE ESPANA
English 6020, 6125, 7275, 9630, 9745, 9765, 11820, 11880, 15375 kHz
French 6020, 6125, 7275, 9745, 9765, 11820, 11880, 15375 kHz
Spanish 5970, 6020, 6125, 7450, 9360, 9570, 9630, 9650, 9685, 9745, 9875, 11730, 11775, 11790, 11815, 11920, 11945, 15125, **15365**, 15380, 15395, 17770, 17845, 17890, 21575 kHz
Multilingual 7450, 9570, 9875, 11790, 11815, 11920, 15380, 15395, 17770, 17845, 21575 kHz

SRI LANKA
SRI LANKA BROADCASTING CORP
English 9720, 11800 kHz

SURINAME
RADIO SURINAME INTERNATIONAL
Multilingual **17755** kHz

SWAZILAND
SWAZI COMMERCIAL RADIO
English 4980 kHz
TRANS WORLD RADIO
English 7120, 9550 kHz
French 7195, 9540, 9550 kHz
German 4760 kHz

SWEDEN
IBRA RADIO
French **9720** kHz
German **6110** kHz
Multilingual **9590**, **9685** kHz
RADIO SWEDEN INTERNATIONAL
English 6045, 6065, 7175, 9565, 9630, 9655,9660, 9695, 9700, 9715, 11705, 11735, 11785, 11845, 11950, 15110, 15190, 15245, 15345, 15390, 17785, 17840, 21690 kHz
French 6065, 9615, 9630, 11845, 15240, 15245, 15345 kHz
German 6065, 7265, 9615, 9655 kHz
Spanish 6065, 9605, 9615, 9655, 9695, 11705 kHz

SWITZERLAND
RED CROSS BROADCASTING SERVICE
English 6135, 7210, 9560, 9665, 9725, 9730, 9870, 9885, 11745, 11795, 11905, 11955, 17830 kHz
French 7210 kHz
German 7210 kHz
Spanish 6135, 7210, 9625, 9725, 11925 kHz
Multilingual 9535, 9670, 9885, 11955, 17830 kHz
SWISS BROADCASTING CORP
French 3985, 6165, 9535 kHz
German 3985, 6165, 9535 kHz
SWISS RADIO INTERNATIONAL
English 3985, 6135, 6165, 6190, 9535, 9560, 9590, 9625, 9665, 9725, 9730, 9870, 9885, 11745, 11795, 11840, 11905, 11925, 11935, 11955, 12030, 15430, 17830 kHz
French 3985, 5965, 6135, 6165, 9535, 9560, 9590, 9625, 9665, 9670, 9725, 9730, 9870, 9885, 11745, 11795, 11840, 11905, 11935, 11955, 12030, 15430, 17830 kHz
German 3985, 5965, 6135, 6165, 9535, 9560, 9590, 9625, 9665, 9670, 9725, 9730, 9870, 9885, 11745, 11795, 11840, 11905, 11925,

11955, 12030, 15430, 17830 kHz
Spanish 5965, 6035, 6135, 9590, 9625, 9725, 9885, 11925, 11955 kHz

SYRIA
SYRIAN BROADCASTING SERVICE
English 9950, 12085, 15020 kHz
French 9950, 12085, 15020 kHz
German 9950, 12085, 15020 kHz
Spanish 9950, 12085 kHz

TANZANIA
RADIO TANZANIA
English 9684 kHz

THAILAND
RADIO THAILAND
English 9655, 11905 kHz
French 9655, 11905 kHz
Japanese 9655, 11905 kHz

TOGO
RADIO LOME
English 5047, 7265 kHz
Multilingual 5047, 7265 kHz

TURKEY
TURKISH RADIO TV CORP
English 7135, 7215, 7225, 9505, 9560, 15260, 17760 kHz
French 7215 kHz
German 7215 kHz

UNITED ARAB EMIRATES
UAE RADIO
English 9550, 11730, 11955, 15300, 15320, 17775, 17830, 21605, 21700 kHz

UNITED KINGDOM
BBC
English **3915**, 3955, 3975, **5965**, **5975**, **6005**, 6010, **6030**, 6045, **6050**, **6065**, **6080**, **6120**, 6125, 6140, 6150, **6175**, **6190**, **6195**, **7105**, **7120**, **7135**, 7150, **7160**, 7165, **7180**, 7185, **7210**, 7230, **7260**, 7320, 7325, 9410, **9510**, **9515**, **9580**, **9590**, **9600**, 9610, 9640, 9660, **9715**, **9725**, 9750, 9760, 9915, **11745**, **11750**, **11775**, 11780, **11820**, **11830**, **11860**, **11955**, 12040, 12095, 15070, **15105**, 15215, **15260**, 15270, **15310**, **15360**, **15390**, **15400**, **15420**, **15440**, 17695, 17705, **17710**, **17740**, **17790**, 17810, **17880**, **17885**, 18080, 21470, 21710 kHz
French 3975, 5975, 6010, 6125, 6195, **7105**, 7150, 7165, 7210, 7230, **9600**, **9610**, 9670, 9915, 11720, 11780, 11825, **15105**, 15115, 15150, 17810, 21640 kHz
German 3975, **6030**, 6195, 9530, 9565 kHz
Spanish **6055**, 6110, 7140, **9765**, **11820**, **15285**, **17830** kHz
Japanese **6080**, **7180**, **9580**, **9725**, **11955**, **15360** kHz

USA
AFRTS—US MILITARY
English 6030, 6125, 9530, 9700, 11730, **15265**, 15330, 15345, 15430 kHz
KCBI
English 11735, 11910 kHz
KGEI—VOICE OF FRIENDSHIP
English 15280 kHz
Spanish 9615, 15280 kHz
KNLS—NEW LIFE STATION
English 7355, 11700, 11820, 11860, 11930 kHz
KUSW
English 6005, 9680, 9755, 11930, 17720 kHz
KVOH—VOICE OF HOPE
English 9495, 17775 kHz
Spanish 17775 kHz
RADIO EARTH
English 7355 kHz
RADIO MARTI
Spanish 6075, 9525, 9570, 9590, 11930 kHz
VOICE OF AMERICA
English **3990**, **5965**, **5995**, **6035**, **6040**, **6045**, **6060**, 6080, **6095**, **6110**, 6125, 6130, **6180**, **7170**, **7195**, **7200**, **7205**, **7275**, **7280**, **7325**, 8110, 9350, 9455, **9530**, **9540**, **9550**, **9575**, **9635**, 9640, 9650, **9670**, **9700**, **9715**, **9740**, **9760**, **9770**, 9775, 9815, 10869, 11090, 11580, 11695, **11715**, **11720**, 11740, **11760**, **11775**, **11805**, **11835**, **11915**, **11920**, **11925**, 14398, 15120, **15155**, **15160**, **15185**, **15195**, **15205**, **15215**, **15260**, **15290**, **15305**, 15410, **15425**, **15445**, 15580, **15600**, **17735**, **17740**, 17775, 17785, 17800, **17820**, 17850, **17870**, 18137.5, 19480, **21540** kHz
French 6020, **6180**, **7135**, **7265**, 9565, **9605**, 10869, **11840**, **11850**, **11875**, 11890, **11920**, 15195, **15315**, **15400**, **15600**, 15650, 17640, **17705**, **17730**, 19261.5, 19480, **21550**, **21680** kHz
Spanish 5745, 6040, 6140, 6155, 6190, 6873, 9465, 9525, 9540, 9640, 9670, 9840, 11740, 11890, 11895, 11950, 15160, 15185, 15195, 15265, **15285**, 15375, 15400, 17710, 17715, 17730, 17765, 17810, **17830**, 21560, 21580, 21590, 21610 kHz
Multilingual **7175**, 9575, **9750**, 10869, **11710**, 11915, **15600**, **17715**, **21500**kHz
VOICE OF THE OAS
Spanish 9565, 11830, 15160 kHz
WCSN—CHRISTIAN SCIENCE MONITOR
English 7365, 9465, 9815, 11945, 15270, 15280, 15300, 15390, 15395, 17640 kHz
French 7365, 9465, 9815, 11945, 15270, 15280, 15300, 15390, 15395, 17640 kHz
German 7365, 9465, 9815, 11945, 15270, 15280, 15300, 15390, 15395, 17640 kHz
WINB—WORLD INTERNATIONAL BC
English 15400 kHz
Multilingual 15145 kHz
WMLK—ASSEMBLIES OF YAWEH
English 9455 kHz

WORLD HARVEST RADIO
English 5995, 6000, 6010, 6100, 6155, 7355, 7400, 9580, 9770, 11770, 11790, 11980, 15105, 17835 kHz
WRNO WORLDWIDE
English 6155, 6185, 7355, 9852.5, 11705, 15420 kHz
Multilingual 6185, 9715, 11965 kHz
WYFR—FAMILY RADIO
English 6065, 6100, 7355, 9510, 9535, 9660, 9852.5, **11550**, 11580, 11805, 11830, 11875, **15055**, 15170, 15355, 15440, 15566, 17640, 17750, 17845, 21525, 21615 kHz
French 5960, 5985, 6015, 6085, 6175, 9605, 9815, 9852.5, 11580, 11830, 15170, 15365, 15440, 17750, 17845, 21525 kHz
German 6015, 7355, 9815, 9852.5, 11580, 15440, 17845 kHz
Spanish 6065, 6085, 6105, 6175, 9510, 9550, 9605, 9660, 9680, 9705, 9715, 11580, 11715, 11855, 11885, 15170, 15215, 15225, 15355, 15365, 15440, 15566, 17640, 17730, 17750, 17785, 17805 kHz

USSR

"RADIO MAGALLANES"
Spanish **7240**, 7440, **9470**, **9490**, **9640**, **9650**, **9715**, **11630**, **11650**, **11745**, 11800, **11860**, **11900**, **12020** kHz
KAZAKH RADIO
German 4545, 5970, 6180, 9780, 11950 kHz
RADIO KIEV
English 6020, 6165, 7165, 7195, 7205, 7280, 7330, 9640, 9710, 9765, 9800, 11720, 11790, 11860, 13605 kHz
German 5980, 6165, 7195, 7330 kHz
RADIO MOSCOW/RADIO PEACE & PROGRESS
English 5900, 5905, 5920, 5940, 7100, **7115**, 7305, 7310, 7315, 7320, 7330, 7335, 7355, 7400, 7440, 9450, 9470, 9480, **9600**, 9775, 9780, 9785, 9795, 9800, 9810, 9865, 11675, **11750**, **11840**, 11975, 12000, 12005, 12010, 12015, 12030, 12045, 12050, 12055, 12060, 12070, 12075, 13605, 13645, 13655, 13660, 13680, 13705, 15110, **15135**, 15460, 15480, 15490, 15500, 15515, 15530, 15540, 15585, 17680, 21585, 21690, 21725, 21740 kHz
French 5950, 6010, 7160, 7175, 7240, 7400, 7440, 9480, 9490, 9610, 9650, 9710, 9745, 9810, 11745, 11805, 11880, 12010, 12020, 12050, 12055, 15530 kHz
German 5950, 6130, 6145, 7360, 12020, kHz
Spanish 6010, 6105, 6115, 6145, 7160, 7240, 7280, 7350, 7360, 7420, 7440, 9470, 9490, 9520, 9610, 9640, 9650, 9665, 9670, 9675, 9710, 9785, 9795 kHz
Japanese 4825, 5940, 5950, 5960, 6020, 6050, 6060, 6065, 7170, 7175, 7185, 7260, 7280, 7340, 9520, 9540, 9565, 9795, 9865, 9895, 11730, 11915, 11960, 12030, 15560 kHz
Multilingual 9470, 15140, 15330, 15490, 15500 kHz
RADIO TASHKENT
English 5945, 5985, 7325, 9540, 9600, 9715, 11785, 15460 kHz
RADIO TIKHIY OKEAN
English 4485, 5900, 5950, 5980, 6020, 6035, 6080, 6190, 7210, 7260, 7370, 9580, 9620, 9635, 9795, 9810, 11730, 11815, 11900, 11910, 11950, 12030, 12050, 12070, 17775 kHz
RADIO VILNIUS
English 6020, 6100, 6200, 7165, 9640, 9765, 11720, 11790, 11860, 13605 kHz
RADIO YEREVAN
English 11790, 11860, 13605 kHz
French 15280 kHz
Spanish 9480 kHz
RADIO STATION SOVIET BELORUSSIA
German 5980, 6165, 6185, 7175, 7205, 7330, 7420, 9560, 11960 kHz

VATICAN STATE

VATICAN RADIO
English 6015, 6030, 6145, 6150, 6185, 6190, 6248, 7125, 7250, 9605, 9610, 9615, 9625, 9645, 9650, 11700, 11725, 11740, 11760, 11775, 11780, 11810, 11830, 11845, 15115, 15120, 15190, 17730, 17840, 17865, 21485 kHz
French 6030, 6150, 6185, 6190, 6248, 7250, 9605, 9625, 9645, 11700, 11725, 11740, 11760, 11780, 11810, 11845, 15120, 15190, 17730, 17840, 21485 kHz
German 6185, 6190, 6248, 7250, 9645, 11740 kHz
Spanish 6030, 6035, 6150, 6190, 6248, 7250, 9615, 9645, 9705, 11740, 11780, 11845, 15405, 17740, 17870, 21725 kHz
Japanese 6015, 9615, 11830, 15190, 17865 kHz
Multilingual 6190, 6248, 7250, 9625, 9645, 11700, 11740, 15120 kHz

VENEZUELA

RADIO NACIONAL
Spanish 9500, 9540 kHz

YUGOSLAVIA

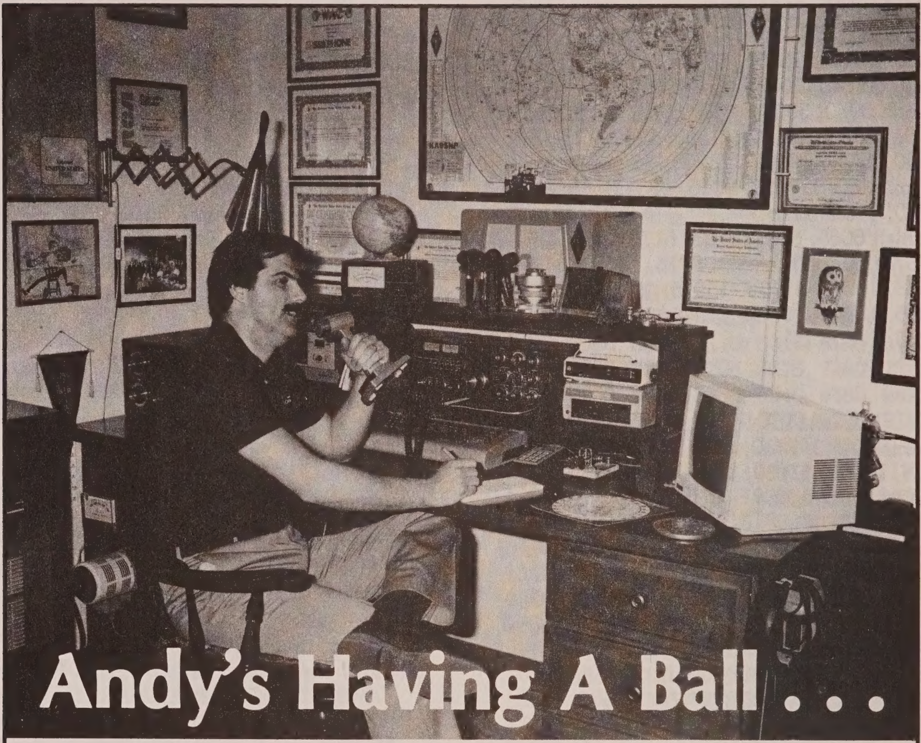
RADIO LJUBLJANA
Multilingual 6100, 7240, 9620 kHz
RADIO YUGOSLAVIA
English 5980, 6100, 7240, 9620, 11735, 15240 kHz
French 5980, 6100, 7240, 9620, 15240 kHz
German 5980, 6100, 7240, 9620 kHz
Spanish 6100, 7240, 9620, 11735 kHz

ZAIRE

LA VOIX DU ZAIRE
Multilingual 15245 kHz

ZAMBIA
RADIO ZAMBIA
Multilingual 4910 kHz
RADIO ZAMBIA—ZBS
English 9505, 11880 kHz
Multilingual 6165, 7220, 7235 kHz

ZIMBABWE
ZIMBABWE BROADCASTING CORP
English 6020 kHz
Multilingual 5975 kHz



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SUMMARY OF WORLD BAND BROADCASTING ACTIVITY

Fully 161 of the world's countries, from the giant USSR to tiny Bhutan—plus various extralegal stations—broadcast within the world radio spectrum, which is divided into two major parts: the *Tropical bands* from 2.2–3.9 and 4.0–5.73 MHz, plus the *International bands* from 3.9–4.0 and 5.7–26.1 MHz.

Although the Tropical bands consist mainly of broadcasts intended for the home audience, the nature of world band radio is such that they are often heard thousands of kilometers away. The International bands, in contrast, consist mainly of powerful stations intended for audiences abroad. Even then, many domestic stations operate here, as well, and also can be heard for great distances.

Jamming consists of deliberate interference directed against a broadcaster by those who are trying to keep the programs from being heard. Jamming takes place within the Tropical and International bands alike, but in practice is much more common within the International bands. Jammed hours given here are listed alongside the "victim" country—not the country actually doing the jamming.

Countries listed are those responsible for the material being broadcast. So, Radio Moscow, for example, is listed under "USSR" regardless of whether it is aired from transmitters within the USSR or from relay sites abroad.

Summary of World Broadcasting Activity—Tropical Broadcasting (Total Spectrum Occupancy in Hours per Week)

Country	Total Hours	Total Jammed
1 BRAZIL	10071	None
2 PERU	5554	None
3 USSR	5379	None
4 CHINA (PR)	5219	None
5 INDONESIA	2977	None
6 ECUADOR	2669	None
7 BOLIVIA	2471	None
8 USA	1507	None
9 PAPUA NEW GUINEA	1332	None
10 VENEZUELA	1323	None
11 COLOMBIA	1302	None
12 KOREA (DPR)	1125	None
13 INDIA	1014	None
14 MALAYSIA	834	None
15 ANGOLA	745	None
16 MONGOLIA	667	None
17 AUSTRALIA	594	None
18 GUATEMALA	553	None
19 CLANDESTINE (M EAST)	453	369
20 MOZAMBIQUE	396	None
21 NIGERIA	354	None
22 NAMIBIA	344	None
23 SRI LANKA	334	None
24 CAMEROON	294	None
25 COSTA RICA	292	None
26 SOUTH AFRICA	282	None
27 HONDURAS	271	None
28 AFGHANISTAN	266	None
29 VIETNAM	257	None
30 SINGAPORE	252	None
31 LAOS	217	None
32 CLANDESTINE (ASIA)	200	None
33 NEPAL	198	None
34 KENYA	198	None
35 GHANA	186	None
36 BENIN	185	None
37 BOTSWANA	182	None
38 PAKISTAN	180	14
39 FRENCH GUIANA	175	None
40 LIBERIA	169	None
41 NEW CALEDONIA	168	None
42 COLOMBIA	168	None
43 SWAZILAND	157	None
44 TOGO	155	None
45 SURINAME	147	None
46 NIGER	134	None
47 BELIZE	133	None
48 LESOTHO	133	None
49 ALBANIA	133	None
50 TANZANIA	128	None
51 ZAMBIA	126	None
52 CHAD	126	None
53 THAILAND	125	None
54 HAITI	125	None
55 GABON	122	None
56 ZAIRE	115	None
57 YEMEN (PDR)	113	None
58 MALI	110	None
59 RWANDA	105	None
60 MADAGASCAR	104	None
61 GUINEA	104	None
62 BANGLADESH	96	None
63 CHINA (TAIWAN)	89	89
64 UGANDA	85	None
65 MALAWI	83	None
66 DJIBOUTI (JIBUTI)	83	None
67 SOLOMON IS	75	None
68 FALKLAND ISLANDS	74	None
69 BURKINA FASO	74	None
70 ZIMBABWE	73	None
71 PAKISTAN (AZAD K)	72	None
72 CENTRAL AFRICAN REP	72	None
73 BURUNDI	70	None
74 AUSTRIA	60	None
75 MAURITANIA	58	None
76 CLANDESTINE (AFRICA)	55	22
77 SENEGAL	55	None
78 EQUATORIAL GUINEA	55	None
79 KAMPUCHEA (CAMBODIA)	53	None
80 MEXICO	49	None
81 ARGENTINA	44	None
82 MAURITIUS	42	None
83 MARSHALL ISLANDS	36	None
84 COMOROS	35	None
85 IVORY COAST	35	None
86 BURMA	29	None
87 CLANDESTINE (C AMER)	24	24
88 UNIDENTIFIED	24	None
89 TRISTAN DA CUNHA	15	None
90 IRAN	14	None
91 FRANCE	10	None
92 ICELAND	9	None

Total Tropical Jamming 518 Hours per Week
TOTAL TROPICAL BROADCASTING 55400 Hours per Week

Summary of World Broadcasting Activity—International Broadcasting (Total Spectrum Occupancy in Hours per Week)

1 USSR	28981	None
2 USA	18478	7185
3 CHINA (PR)	10674	6
4 BRAZIL	5358	None
5 UNITED KINGDOM	4608	461
6 GERMANY (FR)	4570	425
7 PERU	3258	None
8 CHINA (TAIWAN)	2589	993
9 FRANCE	2346	None
10 CANADA	2090	None
11 AUSTRALIA	2025	None
12 INDIA	1920	None
13 KOREA (DPR)	1909	None
14 GERMANY (DR)	1904	None
15 MALAYSIA	1860	None
16 ISRAEL	1751	723
17 EGYPT	1667	None
18 JAPAN	1466	None
19 KOREA (REPUBLIC)	1466	None
20 SWITZERLAND	1378	None
21 HOLLAND	1327	40
22 ALBANIA	1322	51
23 INDONESIA	1307	None
24 IRAQ	1284	14
25 ECUADOR	1274	None
26 ITALY	1263	None
27 BOLIVIA	1198	None
28 ALGERIA	1184	None
29 POLAND	1164	None
30 SPAIN	1161	None
31 CZECHOSLOVAKIA	1144	None
32 BULGARIA	1142	None
33 NIGERIA	1127	None
34 SAUDI ARABIA	1103	None
35 CUBA	1087	None
36 HUNGARY	1083	None
37 VIETNAM	1064	None
38 COLOMBIA	1060	None
39 ANGOLA	1047	88
40 IRAN	1043	375
41 VATICAN STATE	1021	6
42 ROMANIA	951	None
43 SOUTH AFRICA	932	None
44 KUWAIT	886	None
45 PHILIPPINES	878	None
46 AUSTRIA	874	None
47 SINGAPORE	798	None
48 PAKISTAN	773	None
49 ARGENTINA	746	None
50 CLANDESTINE (M EAST)	743	628
51 AFGHANISTAN	683	None
52 SWEDEN	617	None
53 CHILE	592	None
54 TURKEY	578	1

Country	Total Hours	Total Jammed
55 UNITED ARAB EMIRATES	569	None
56 LIBYA	531	None
57 COSTA RICA	520	None
58 MOZAMBIQUE	506	None
59 YUGOSLAVIA	494	None
60 SOCIETY ISLANDS	492	None
61 SRI LANKA	491	None
62 GREECE	476	None
63 CLANDESTINE (AFRICA)	469	238
64 LEBANON	469	60
65 THAILAND	468	None
66 PORTUGAL	461	None
67 GUAM	448	None
68 MOROCCO	434	None
69 PARAGUAY	410	None
70 TUNISIA	404	None
71 LAOS	403	None
72 ZAMBIA	398	None
73 CLANDESTINE (ASIA)	396	92
74 BELGIUM	393	None
75 FINLAND	382	None
76 TANZANIA	333	None
77 CAMEROON	325	None
78 CLANDESTINE (C AMER)	321	47
79 OMAN	321	None
80 LUXEMBOURG	319	None
81 SYRIA	313	190
82 KENYA	309	None
83 MONGOLIA	306	None
84 VENEZUELA	305	None
85 GABON	279	None
86 ZIMBABWE	249	None
87 URUGUAY	246	None
88 DOMINICAN REPUBLIC	245	None
89 SENEGAL	238	None
90 NORWAY	233	None
91 YEMEN (REPUBLIC)	226	None
92 NIGER	225	None
93 VANUATU	225	None
94 NORTHERN MARIANA IS	217	None
95 SOMALIA	214	None
96 ETHIOPIA	206	None
97 YEMEN (PDR)	198	None
98 SEYCHELLES	192	None
99 MALI	191	None
100 PAPUA NEW GUINEA	189	None
101 NICARAGUA	186	None
102 GUATEMALA	178	None
103 LIBERIA	178	None
104 IVORY COAST	175	None
105 SWAZILAND	171	None
106 NEW CALEDONIA	168	None
107 COOK ISLANDS	168	None
108 ZAIRE	165	None
109 BANGLADESH	162	None
110 NEW ZEALAND	160	None
111 MADAGASCAR	154	None
112 MEXICO	154	None
113 ANTARCTICA	149	None
114 BOTSWANA	147	None
115 KAMPUCHEA (CAMBODIA)	138	None
116 GUYANA	134	None
117 SIERRA LEONE	130	None
118 MONACO	126	None
119 BURMA	121	None
120 NETHERLANDS ANTILLES	121	None
121 GREENLAND	120	None
122 HONDURAS	119	None
123 EQUATORIAL GUINEA	119	None
124 MALAWI	118	None
125 CLANDESTINE (EUROPE)	118	None
126 QATAR	114	None
127 CYPRUS	108	None
128 RWANDA	105	None
129 GUINEA	104	None
130 GHANA	100	None
131 TOGO	100	None
132 MAURITIUS	84	None
133 UGANDA	81	None
134 DENMARK	79	None
135 FRENCH GUIANA	77	None
136 MARSHALL ISLANDS	77	None
137 FALKLAND ISLANDS	74	None
138 CAPE VERDE	71	None
139 UNIDENTIFIED	67	17
140 BENIN	56	None
141 BURUNDI	50	None
142 COMOROS	46	None
143 CHAD	45	None
144 BURKINA FASO	43	None
145 SOLOMON IS	38	None
146 MAURITANIA	38	None
147 ICELAND	34	None
148 BHUTAN	25	None
149 PAKISTAN (AZAD K)	24	None
150 MALTA	21	None
151 PIRATE (EUROPE)	20	None
152 KIRIBATI	16	None
153 SURINAME	3	None

Total International Jamming 11640 Hours per Week
TOTAL INTERNATIONAL BROADCASTING 156170 Hours per Week

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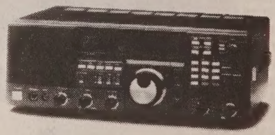
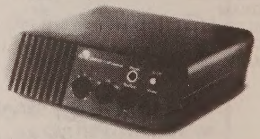
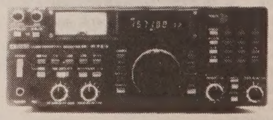


YAESU FRG-8800



LINIPLEX F-1



ICOM R-71A

WORLDSCAN: THE BLUE PAGES

Quick-Access Guide to World Band Schedules

There are over 1,100 channels of news and entertainment available on world band radio. As if this weren't enough, these channels are often shared among several stations. With such an abundance from which to choose, it can take some doing to figure out what's on the air.

Ordinary listings of what's on world band radio are unwieldy because there's so much material. This is why *Passport to World Band Radio* includes this quick-access Worldscan section—the "blue pages." With Worldscan's comprehensive charts, all you need—station, times, languages, targets and more—is there at a glance. If something's not clear, there's a lexicon in the back of the book to explain it. There's even a handy key to languages and the like at the bottom of each Worldscan page.

For example, if you're in North America or Europe listening to the channel of 5975 kHz at 2300 World Time, a glance at Worldscan shows that the BBC's World Service is broadcast in English to both these areas at that time.

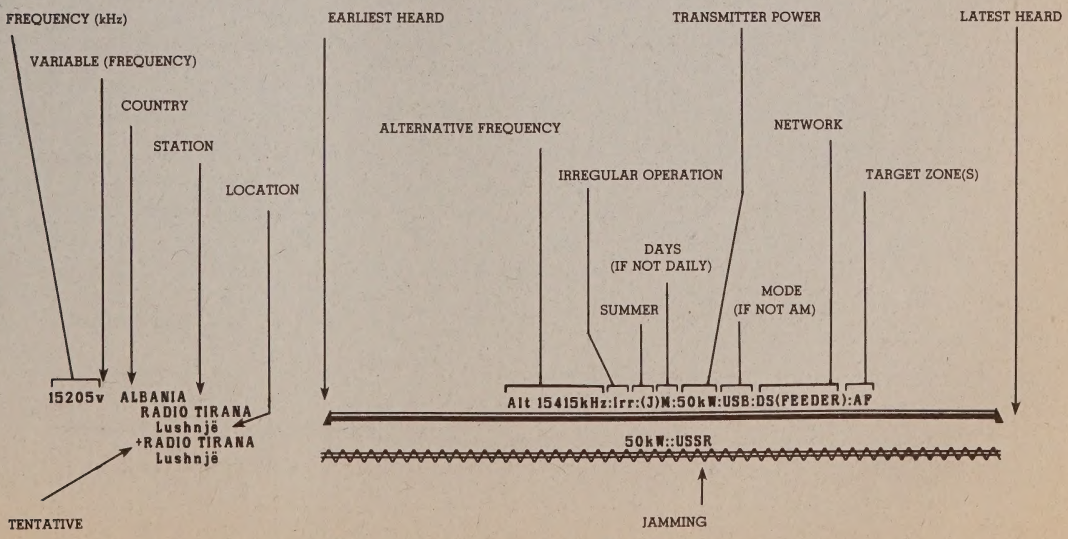
World Time Simplifies Listening

World Time—a handy concept also known as UTC or GMT—is used to eliminate the potential complication of so many time zones throughout the world. It treats the entire world as a single zone and is announced regularly over the air by many world band stations. For example, if you're in New York and it's 6:00 AM EST, you'll hear the time announced as "11 hours UTC" . . . that is, five hours ahead of your local time. You can either keep this "add five hours" figure in your head or keep a separate clock for World Time. Too, as detailed in the "Buyer's Guide," some world band radios come with World Time clocks built-in.

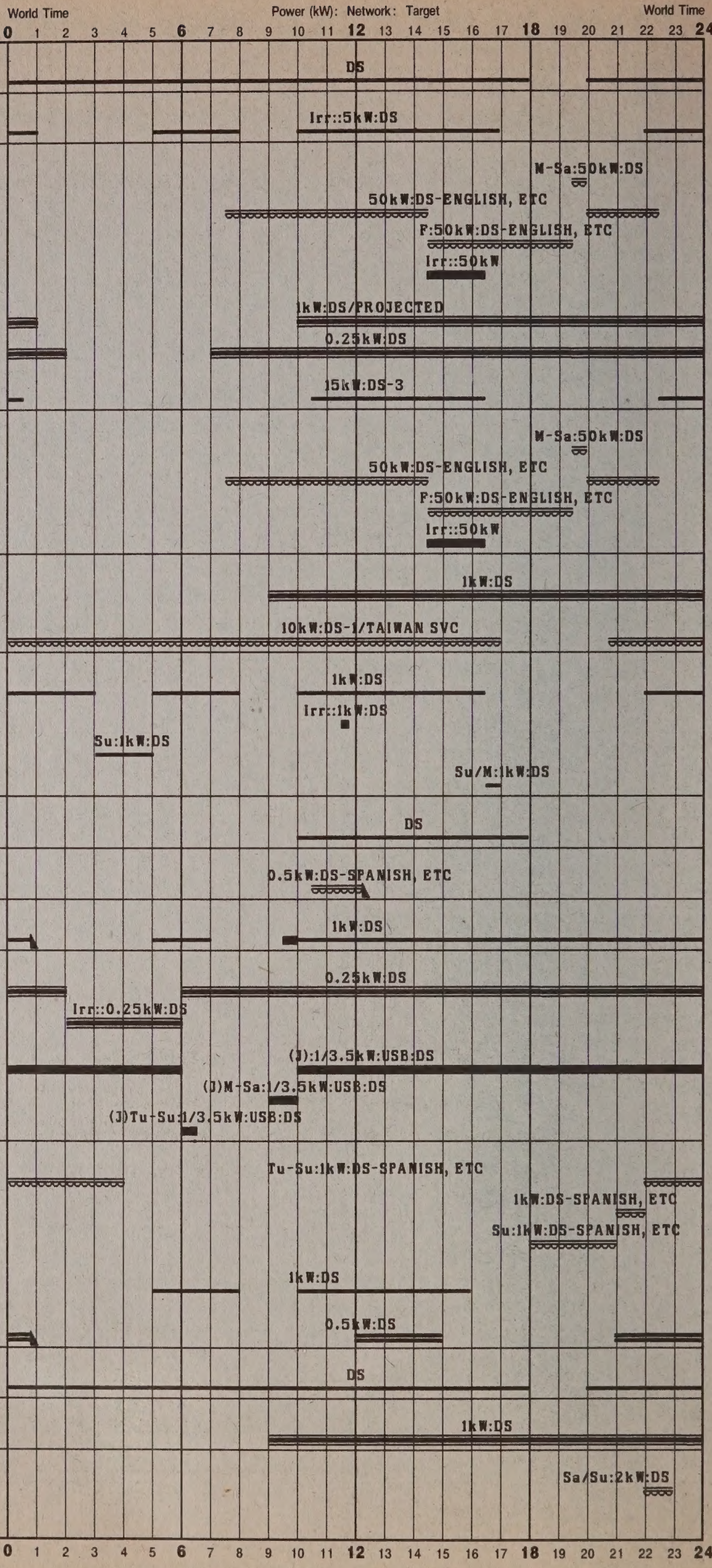
World Band Stations Widely Heard

In the "Introduction to World Band Radio" found elsewhere in this book, it's mentioned that with so many stations on the air at the same time you can't begin to pick them all up. Nevertheless, world band radio is uniquely efficient at traveling great distances. Just because a station targets its programs to another part of the world doesn't mean that you can't hear it where you are. Tune around with "Worldscan" at your side and you'll find hundreds of stations that can be enjoyed even though they're beamed elsewhere.

GUIDE TO WORLDSCAN FORMAT


FREQUENCY (kHz)
VARIABLE (FREQUENCY)
COUNTRY
STATION
LOCATION
EARLIEST HEARD
ALTERNATIVE FREQUENCY
IRREGULAR OPERATION
DAYS (IF NOT DAILY)
SUMMER
TRANSMITTER POWER
NETWORK
MODE (IF NOT AM)
TARGET ZONE(S)
LATEST HEARD
15205v ALBANIA
RADIO TIRANA
Lushnjë
+RADIO TIRANA
Lushnjë
Alt 15415kHz:Irr:(J)M:50kW:USB:DS(FEEDER):AF
50kW::USSR
TENTATIVE
JAMMING

Guides to Worldscan in French, German, and Spanish are included with the lexicons.



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
2300	**KOREA (DPR)** YANGGANG PROV SVC Hyesan	DS
2307	**INDONESIA** R REP INDONESIA Jakarta, Jawa	Irr::5kW:DS
2310	**AUSTRALIA** AUSTRALIAN BC CORP Alice Springs	M-Sa:50kW:DS 50kW:DS-ENGLISH, ETC F:50kW:DS-ENGLISH, ETC
	RADIO AUSTRALIA Alice Springs	Irr::50kW
	BRAZIL +R VALE RIO MADEIRA Humaitá	1kW:DS/PROJECTED
	RADIO PROGRESSO Sousa	0.25kW:DS
	CHINA (PR) YUNNAN PEOPLES BS Kunming	15kW:DS-3
2325	**AUSTRALIA** AUSTRALIAN BC CORP Tennant Creek	M-Sa:50kW:DS 50kW:DS-ENGLISH, ETC F:50kW:DS-ENGLISH, ETC
	RADIO AUSTRALIA Tennant Creek	Irr::50kW
2340	**BRAZIL** RADIO DIFUSORA Itacoatiara	1kW:DS
	CHINA (PR) FUJIAN PEOPLES BS Fuzhou	10kW:DS-1/TAIWAN SVC
2349.8	**INDONESIA** R REP INDONESIA Yogyakarta, Jawa	1kW:DS Irr::1kW:DS Su:1kW:DS Su/M:1kW:DS
2350	**KOREA (DPR)** NORTH HWANGHAE PS Sariwŏn	DS
2360	**GUATEMALA** R MAYA DE BARILLAS Huehuetenango	0.5kW:DS-SPANISH, ETC
2377v	**INDONESIA** R REP INDONESIA Surabaya, Jawa	1kW:DS
2380	**BRAZIL** RADIO EDUCADORA Limeira	0.25kW:DS Irr::0.25kW:DS
	FALKLAND ISLANDS FALKLAND IS BC STN Stanley	(J):1/3.5kW:USB:DS (J)M-Sa:1/3.5kW:USB:DS (J)Tu-Su:1/3.5kW:USB:DS
2390	**GUATEMALA** LA VOZ DE ATITLAN Santiago Atitlán	Tu-Su:1kW:DS-SPANISH, ETC 1kW:DS-SPANISH, ETC Su:1kW:DS-SPANISH, ETC
	INDONESIA R REP INDONESIA Cirebon, Jawa	1kW:DS
	MEXICO RADIO HUAYACOCOTLA Huayacocotla	0.5kW:DS
2400	**KOREA (DPR)** SOUTH HAMGYONG PS Hamhŭng	DS
2409	**BRAZIL** R TRANSAMAZONICA Senador Guiomard	1kW:DS
2410 (con'd)	**PAPUA NEW GUINEA** RADIO ENGA Wabag	Sa/Su:2kW:DS

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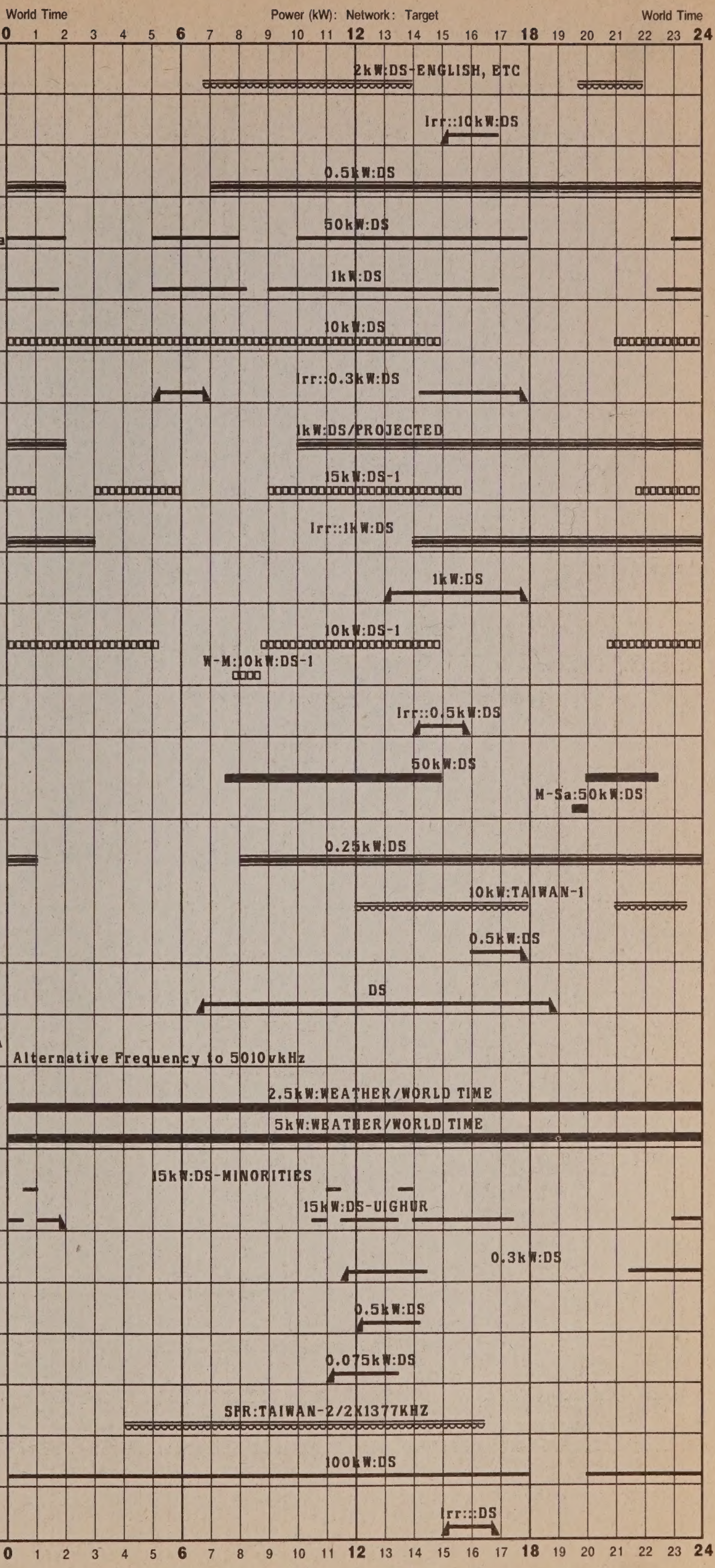

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
2410 (con'd)	PAPUA NEW GUINEA RADIO ENGA Wabag	2kW:DS-ENGLISH, ETC
2418	INDONESIA R REP INDONESIA Bandung, Jawa	Irr::10kW:DS
2420	BRAZIL RADIO SAO CARLOS São Carlos	0.5kW:DS
2432.5	INDONESIA R REP INDONESIA Banda Aceh, Sumat'a	50kW:DS
2439.5	INDONESIA R REP INDONESIA Surakarta, Jawa	1kW:DS
2445	CHINA (PR) JIANGXI PEOPLES BS Nanchang	10kW:DS
2456	INDONESIA R REP INDONESIA Díli, Timur	Irr::0.3kW:DS
2460	BRAZIL +PROGRESSO DO ACRE Rio Branco	1kW:DS/PROJECTED
	CHINA (PR) YUNNAN PEOPLES BS Kunming	15kW:DS-1
2470	BRAZIL RADIO CACIQUE Sorocaba	Irr::1kW:DS
2472v	INDONESIA R REP INDONESIA Purwokerto, Jawa	1kW:DS
2475	CHINA (PR) ZHEJIANG PBS Hangzhou	10kW:DS-1 W-M:10kW:DS-1
2478v	INDONESIA +R ANGKATAN BERSE'A Jakarta, Jawa	Irr::0.5kW:DS
2485	AUSTRALIA AUSTRALIAN BC CORP Katherine	50kW:DS M-Sa:50kW:DS
2490	BRAZIL RADIO 8 SETEMBRO Descalvado	0.25kW:DS
	CHINA (PR) VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-1
	INDONESIA R REP INDONESIA Ujung Pandang, Su'i	0.5kW:DS
2492	INDONESIA R REP INDONESIA Mataram, Lombok	DS
2495v	MADAGASCAR RADIO MADAGASIKARA Antananarivo	Alternative Frequency to 5010 kHz
2500	USA WWV Fort Collins, Colo	2.5kW:WEATHER/WORLD TIME
	WWVH Kekaha, Hawaii	5kW:WEATHER/WORLD TIME
2560	CHINA (PR) CENTRAL PEOPLES BS Urümqi	15kW:DS-MINORITIES
	XINJIANG PBS Urümqi	15kW:DS-UIGHUR
2581.6	INDONESIA RPD TENGAH SELATAN Soë, Timur	0.3kW:DS
2694v	INDONESIA R REP INDONESIA Ende, Flores	0.5kW:DS
2739.6	INDONESIA RPD SUMBA TIMUR Waingapu	0.075kW:DS
2754	CHINA (PR) VO THE STRAIT-PLA Fuzhou	SPR:TAIWAN-2/2X1377KHZ
2850v	KOREA (DPR) KOREAN CENTRAL BS Pyŏngyang	100kW:DS
2901	INDONESIA R REP INDONESIA Mataram, Lombok	Irr::DS

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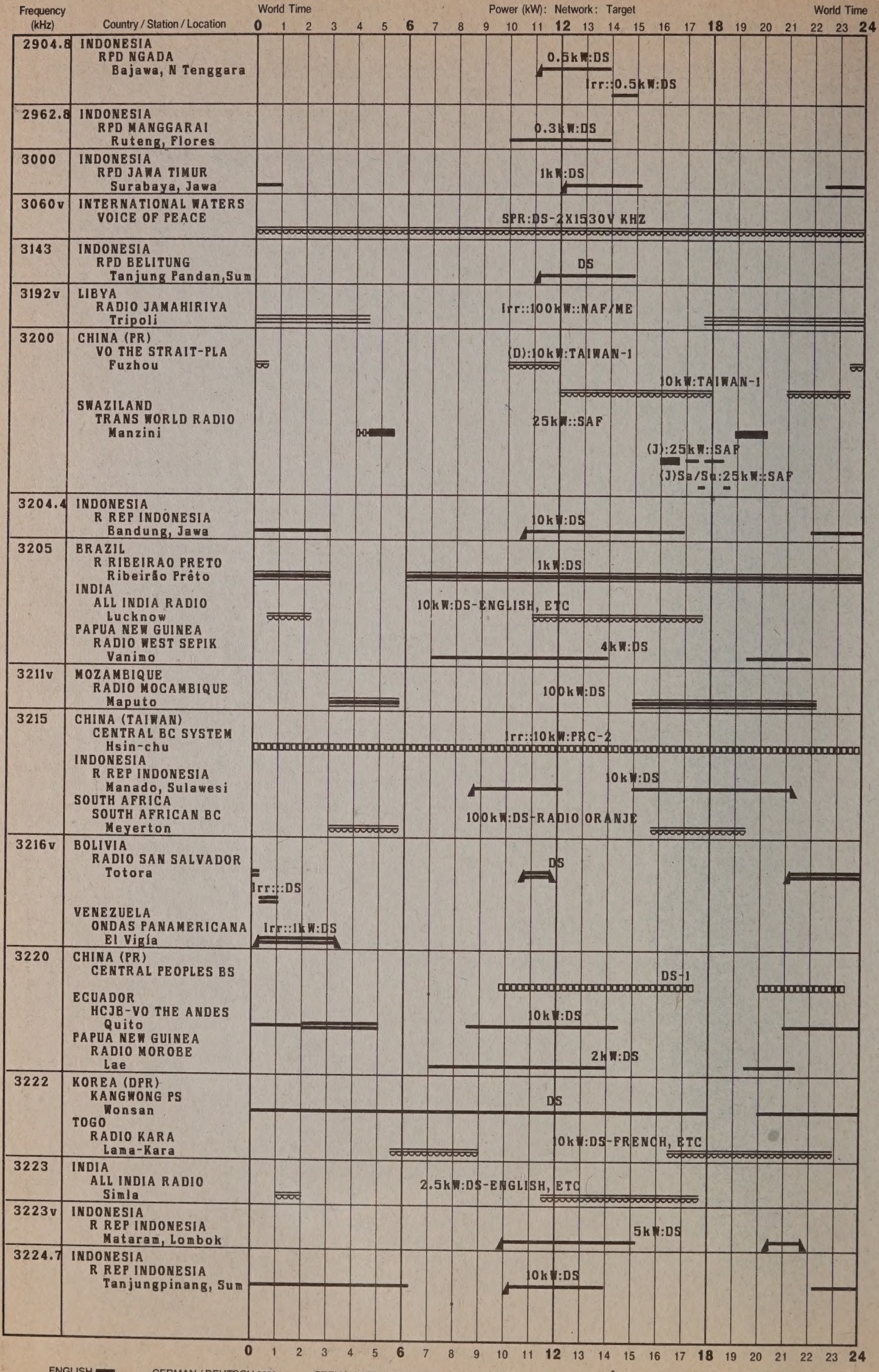

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
2904.8	INDONESIA RPD NGADA Bajawa, N Tenggara	0.5kW:DS Irr::0.5kW:DS
2962.8	INDONESIA RPD MANGGARAI Ruteng, Flores	0.3kW:DS
3000	INDONESIA RPD JAWA TIMUR Surabaya, Jawa	1kW:DS
3060v	INTERNATIONAL WATERS VOICE OF PEACE	SPR:DS-2X1530V KHZ
3143	INDONESIA RPD BELITUNG Tanjung Pandan,Sum	DS
3192v	LIBYA RADIO JAMAHIRIYA Tripoli	Irr::100kW::NAF/ME
3200	CHINA (PR) VO THE STRAIT-PLA Fuzhou	(D):10kW:TAIWAN-1 10kW:TAIWAN-1
	SWAZILAND TRANS WORLD RADIO Manzini	25kW::SAF (J):25kW::SAF (J)Sa/Su:25kW::SAF
3204.4	INDONESIA R REP INDONESIA Bandung, Jawa	10kW:DS
3205	BRAZIL R RIBEIRAO PRETO Ribeirão Prêto	1kW:DS
	INDIA ALL INDIA RADIO Lucknow	10kW:DS-ENGLISH, ETC
	PAPUA NEW GUINEA RADIO WEST SEPIK Vanimo	4kW:DS
3211v	MOZAMBIQUE RADIO MOCAMBIQUE Maputo	100kW:DS
3215	CHINA (TAIWAN) CENTRAL BC SYSTEM Hsin-chu	Irr::10kW:PRC-2
	INDONESIA R REP INDONESIA Manado, Sulawesi	10kW:DS
	SOUTH AFRICA SOUTH AFRICAN BC Meyerton	100kW:DS-RADIO ORANJE
3216v	BOLIVIA RADIO SAN SALVADOR Totora	DS Irr::DS
	VENEZUELA ONDAS PANAMERICANA El Vigía	Irr::1kW:DS
3220	CHINA (PR) CENTRAL PEOPLES BS	DS-1
	ECUADOR HCJB-VO THE ANDES Quito	10kW:DS
	PAPUA NEW GUINEA RADIO MOROBE Lae	2kW:DS
3222	KOREA (DPR) KANGWONG PS Wonsan	DS
	TOGO RADIO KARA Lama-Kara	10kW:DS-FRENCH, ETC
3223	INDIA ALL INDIA RADIO Simla	2.5kW:DS-ENGLISH, ETC
3223v	INDONESIA R REP INDONESIA Mataram, Lombok	5kW:DS
3224.7	INDONESIA R REP INDONESIA Tanjungpinang, Sum	10kW:DS

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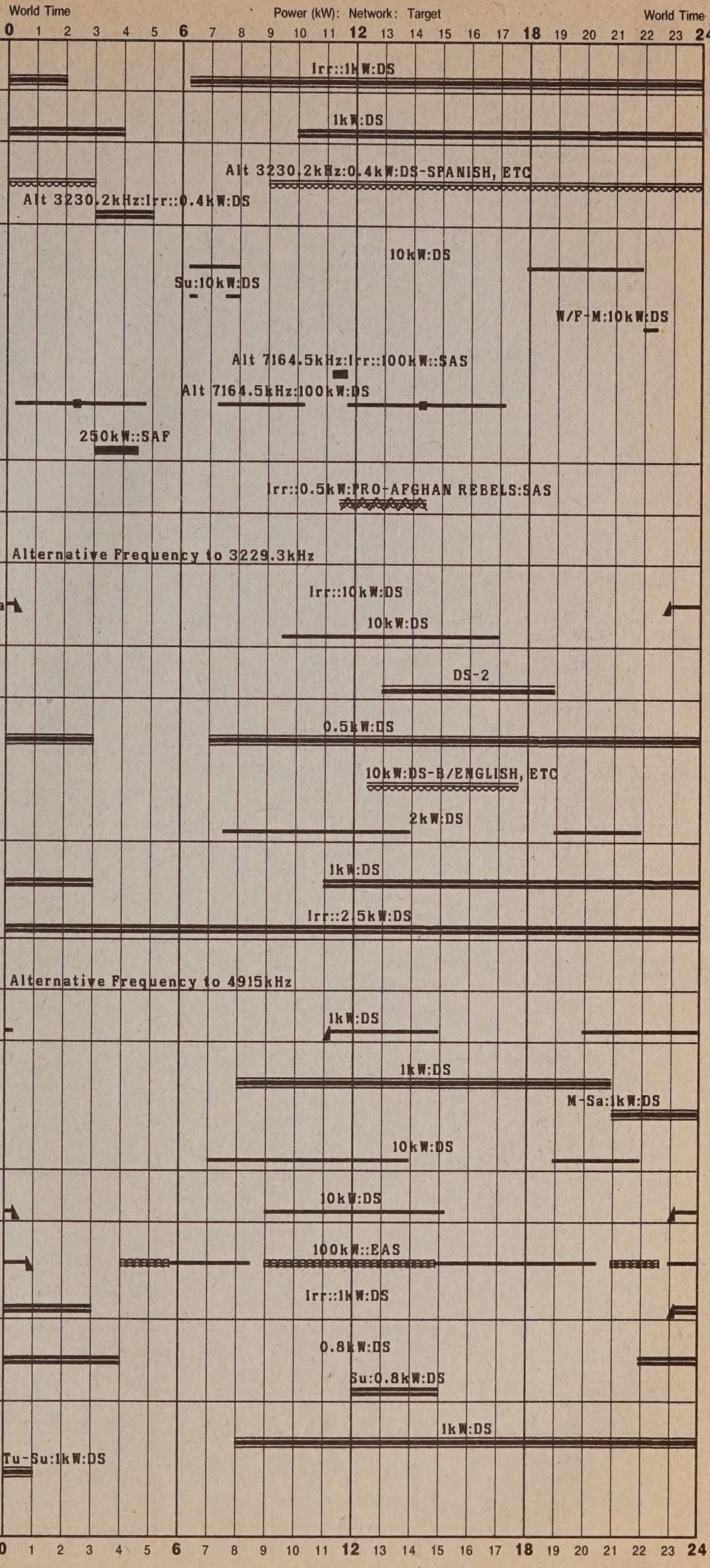
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
3225	BRAZIL LINS RADIO CLUBE Lins	Irr::1kW:DS
3225v	VENEZUELA RADIO OCCIDENTE Tovar	1kW:DS
3229.3	PERU R SOL DE LOS ANDES Juliaca	Alt 3230.2kHz:0.4kW:DS-SPANISH, ETC Alt 3230.2kHz:Irr::0.4kW:DS
3230	LIBERIA RADIO ELWA Monrovia	10kW:DS Su:10kW:DS W/F-M:10kW:DS
	NEPAL RADIO NEPAL Harriharpur	Alt 7164.5kHz:Irr::100kW::SAS Alt 7164.5kHz:100kW:DS
	SOUTH AFRICA RADIO RSA Meyerton	250kW::SAF
3230v	CLANDESTINE (ASIA) 'VO AFGHANISTAN' Pakistan	Irr::0.5kW:PRO-AFGHAN REBELS:SAS
3230.2	PERU R SOL DE LOS ANDES Juliaca	Alternative Frequency to 3229.3kHz
3231.8	INDONESIA R REP INDONESIA Bukittinggi, Sumat'a	Irr::10kW:DS 10kW:DS
3232	MADAGASCAR R MADAGASIKARA Antananarivo	DS-2
3235	BRAZIL RADIO CLUBE Marilia	0.5kW:DS
	INDIA ALL INDIA RADIO Gauhati	10kW:DS-B/ENGLISH, ETC
	PAPUA NEW GUINEA R WEST NEW BRITAIN Kimbe	2kW:DS
3239.6	ECUADOR R ANTENA LIBRE Esmeraldas	1kW:DS
	PERU RADIO AMERICA Lima	Irr::2.5kW:DS
3240	GHANA GHANA BC CORP Accra	Alternative Frequency to 4915kHz
3240.5	INDONESIA R REP INDONESIA Ambon, Maluku	1kW:DS
3245	BRAZIL RADIO CLUBE Varginha	1kW:DS M-Sa:1kW:DS
	PAPUA NEW GUINEA RADIO GULF Kerema	10kW:DS
3249.8	INDONESIA R REP INDONESIA Banjarmasin, Kali'n	10kW:DS
3250	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	100kW::EAS
	PERU RADIO QOLLYASUYO Juliaca	Irr::1kW:DS
3250v	HONDURAS RADIO LUZ Y VIDA Santa Bárbara	0.8kW:DS Su:0.8kW:DS
3255	BRAZIL R EDUCADORA CARIRI Crato	1kW:DS Tu-Su:1kW:DS
(con'd)		



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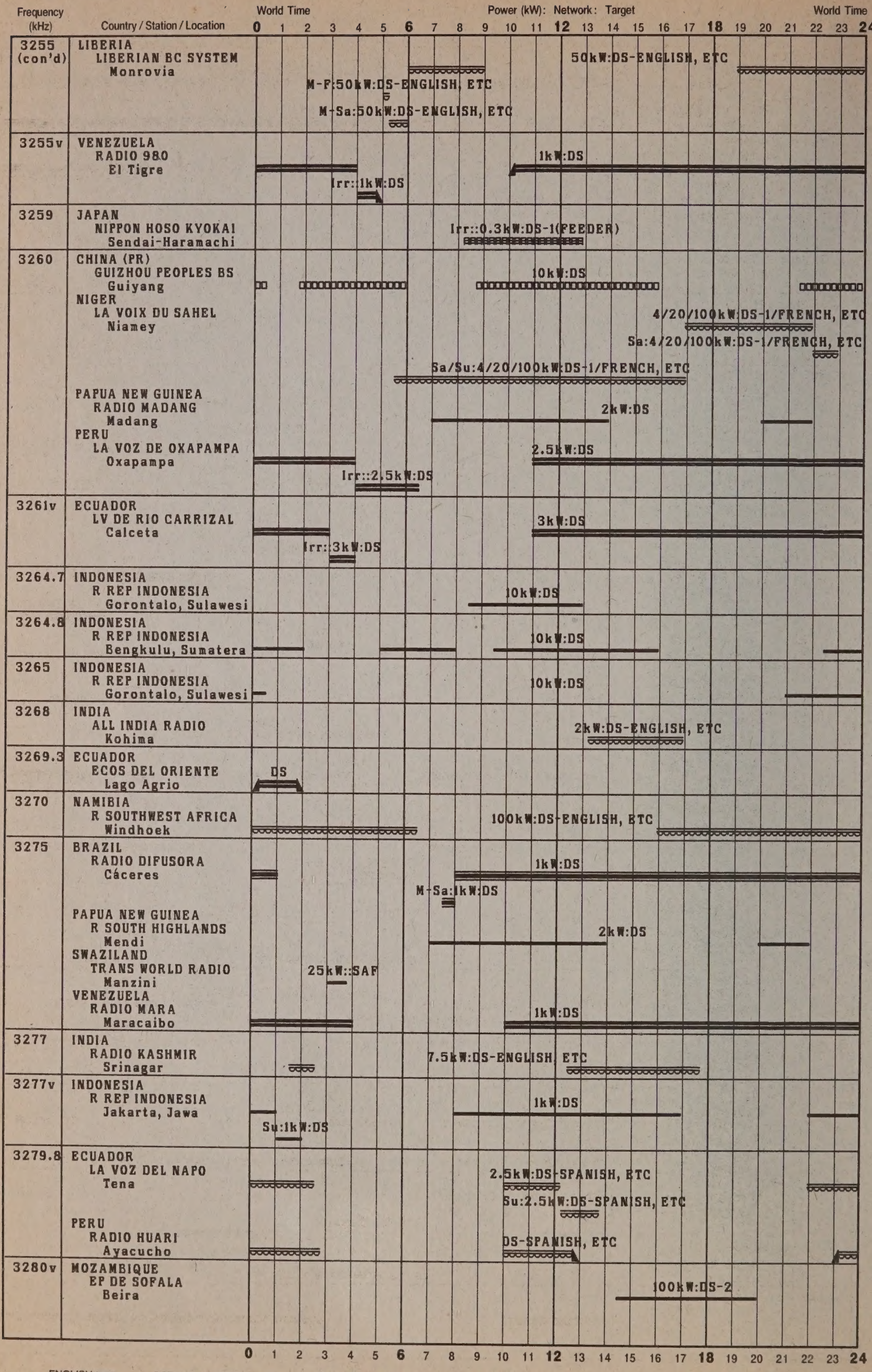

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
3255 (con'd)	LIBERIA LIBERIAN BC SYSTEM Monrovia	50kW:DS-ENGLISH, ETC M-F:50kW:DS-ENGLISH, ETC M-Sa:50kW:DS-ENGLISH, ETC
3255v	VENEZUELA RADIO 980 El Tigre	1kW:DS Irr::1kW:DS
3259	JAPAN NIPPON HOSO KYOKAI Sendai-Haramachi	Irr::0.3kW:DS-1(FEEDER)
3260	CHINA (PR) GUIZHOU PEOPLES BS Guiyang	10kW:DS
	NIGER LA VOIX DU SAHEL Niamey	4/20/100kW:DS-1/FRENCH, ETC Sa:4/20/100kW:DS-1/FRENCH, ETC Sa/Su:4/20/100kW:DS-1/FRENCH, ETC
	PAPUA NEW GUINEA RADIO MADANG Madang	2kW:DS
	PERU LA VOZ DE OXAPAMPA Oxapampa	2.5kW:DS Irr::2.5kW:DS
3261v	ECUADOR LV DE RIO CARRIZAL Calceta	3kW:DS Irr::3kW:DS
3264.7	INDONESIA R REP INDONESIA Gorontalo, Sulawesi	10kW:DS
3264.8	INDONESIA R REP INDONESIA Bengkulu, Sumatera	10kW:DS
3265	INDONESIA R REP INDONESIA Gorontalo, Sulawesi	10kW:DS
3268	INDIA ALL INDIA RADIO Kohima	2kW:DS-ENGLISH, ETC
3269.3	ECUADOR ECOS DEL ORIENTE Lago Agrio	DS
3270	NAMIBIA R SOUTHWEST AFRICA Windhoek	100kW:DS-ENGLISH, ETC
3275	BRAZIL RADIO DIFUSORA Cáceres	1kW:DS M-Sa:1kW:DS
	PAPUA NEW GUINEA R SOUTH HIGHLANDS Mendi	2kW:DS
	SWAZILAND TRANS WORLD RADIO Manzini	25kW::SAF
	VENEZUELA RADIO MARA Maracaibo	1kW:DS
3277	INDIA RADIO KASHMIR Srinagar	7.5kW:DS-ENGLISH, ETC
3277v	INDONESIA R REP INDONESIA Jakarta, Jawa	1kW:DS Su:1kW:DS
3279.8	ECUADOR LA VOZ DEL NAPO Tena	2.5kW:DS-SPANISH, ETC Su:2.5kW:DS-SPANISH, ETC
	PERU RADIO HUARI Ayacucho	DS-SPANISH, ETC
3280v	MOZAMBIQUE EP DE SOFALA Beira	100kW:DS-2

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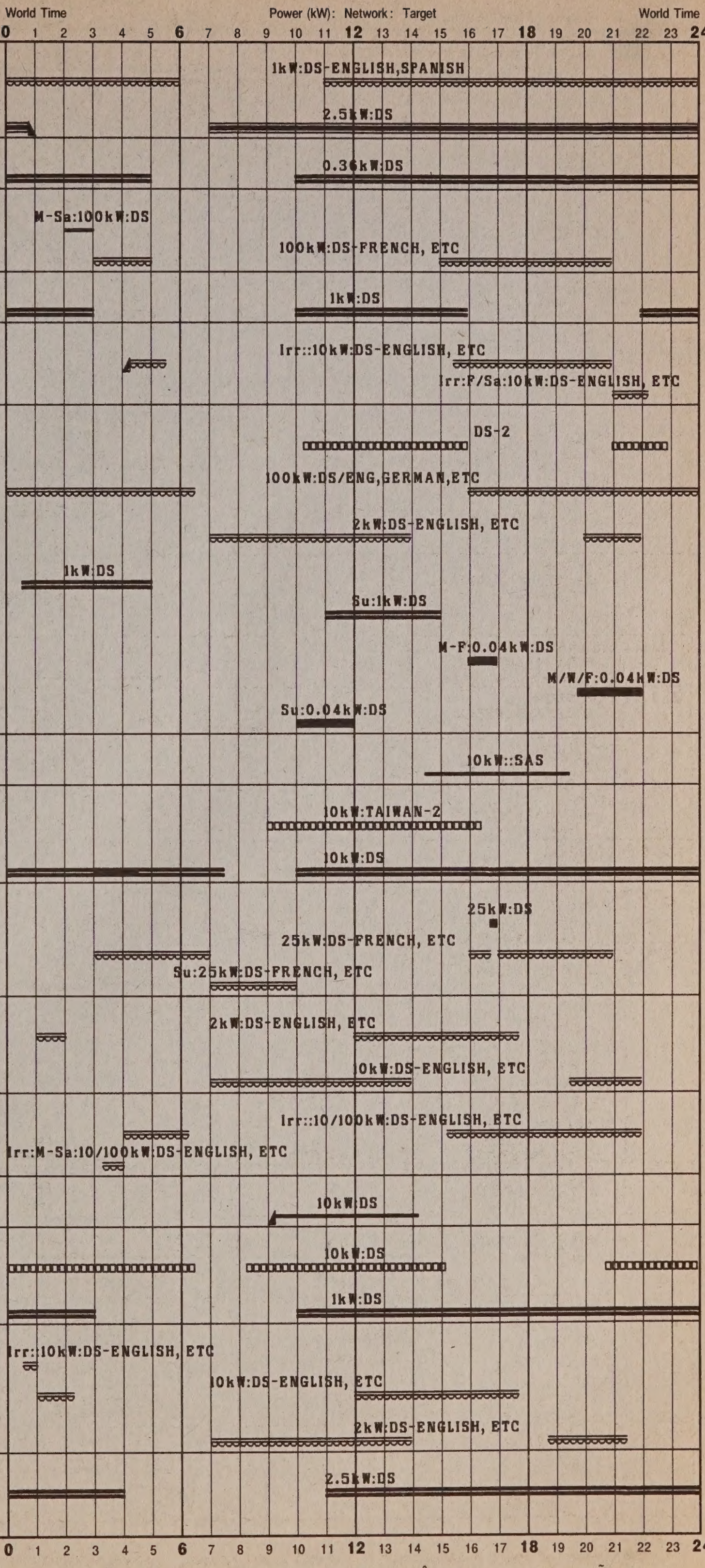

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
3285	BELIZE RADIO BELIZE Belmopan	1kW:DS-ENGLISH,SPANISH
	BRAZIL RADIO BANDEIRANTES Cachoeira Paulista	2.5kW:DS
3286v	ECUADOR RADIO RIO TARQUI Cuenca	0.36kW:DS
3288v	MADAGASCAR R MADAGASIKARA Antananarivo	M-Sa:100kW:DS 100kW:DS-FRENCH, ETC
3289.7	ECUADOR R PANAMERICANA Quero	1kW:DS
3289.8	ZAMBIA RADIO ZAMBIA Lusaka	Irr::10kW:DS-ENGLISH, ETC Irr:F/Sa:10kW:DS-ENGLISH, ETC
3290	CHINA (PR) CENTRAL PEOPLES BS	DS-2
	NAMIBIA R SOUTHWEST AFRICA Windhoek	100kW:DS/ENG,GERMAN,ETC
	PAPUA NEW GUINEA RADIO CENTRAL Port Moresby	2kW:DS-ENGLISH, ETC
	PERU RADIO TAYABAMBA Tayabamba	1kW:DS Su:1kW:DS
	TRISTAN DA CUNHA TRISTAN BC SERVICE Edinburgh	M-F:0.04kW:DS M/W/F:0.04kW:DS Su:0.04kW:DS
3295	INDIA ALL INDIA RADIO Delhi	10kW::SAS
3300	CHINA (PR) VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-2
	GUATEMALA RADIO CULTURAL Guatemala City	10kW:DS
3300v	BURUNDI LA VOIX DE LA REV Bujumbura	25kW:DS 25kW:DS-FRENCH, ETC Su:25kW:DS-FRENCH, ETC
3305	INDIA ALL INDIA RADIO Ranchi	2kW:DS-ENGLISH, ETC
	PAPUA NEW GUINEA RADIO WESTERN Daru	10kW:DS-ENGLISH, ETC
3305.7	ZIMBABWE ZIMBABWE BC CORP Gweru	Irr::10/100kW:DS-ENGLISH, ETC Irr:M-Sa:10/100kW:DS-ENGLISH, ETC
3306	INDONESIA R REP INDONESIA Díli, Timur	10kW:DS
3310	CHINA (PR) JILIN PEOPLES BS Changchun	10kW:DS
	PERU RADIO BAGUA Bagua	1kW:DS
3315	INDIA ALL INDIA RADIO Bhopal	Irr::10kW:DS-ENGLISH, ETC 10kW:DS-ENGLISH, ETC
	PAPUA NEW GUINEA RADIO MANUS Lorengau	2kW:DS-ENGLISH, ETC
3315v	ECUADOR RADIO PASTAZA Puyo	2.5kW:DS

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ▬ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
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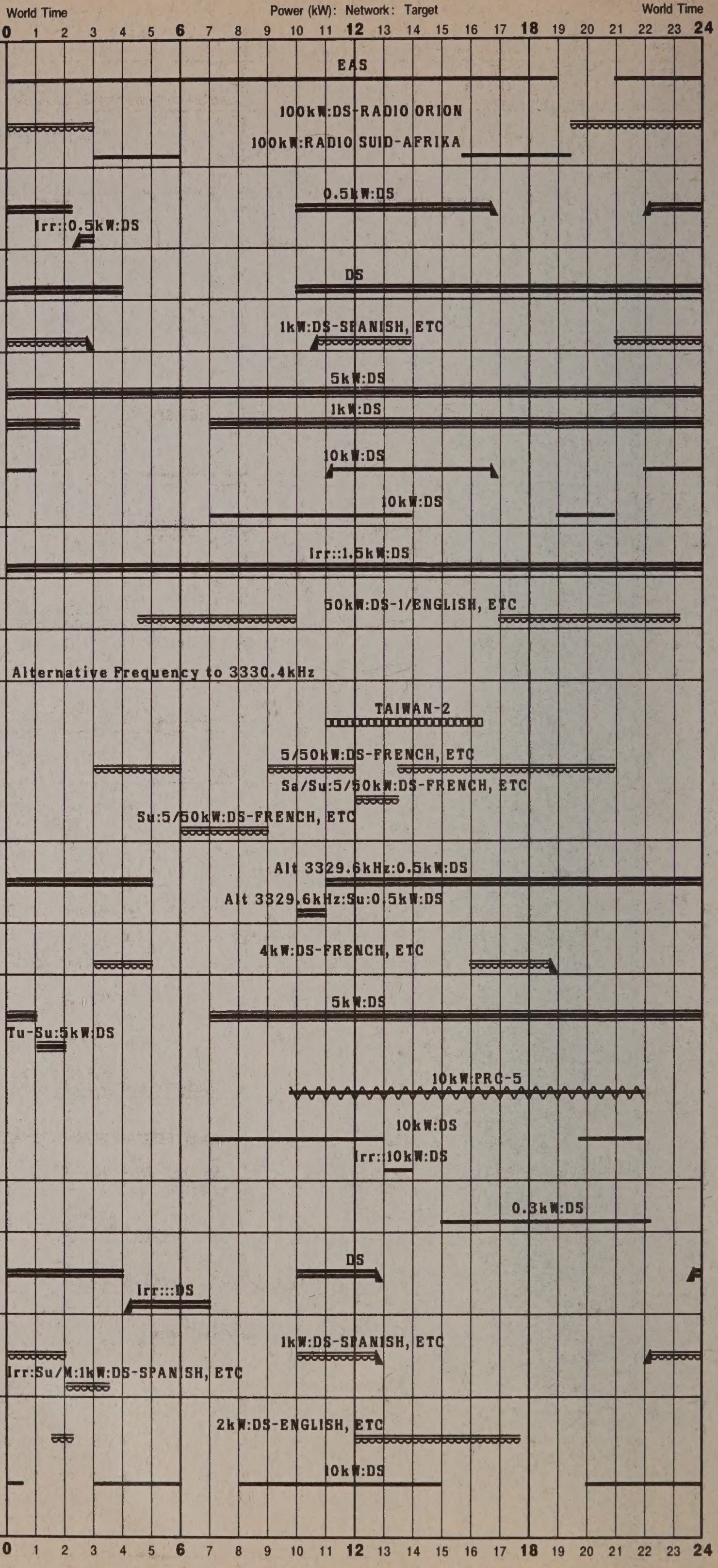
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
3320	**KOREA (DPR)** RADIO PYONGYANG Pyŏngyang	EAS
	SOUTH AFRICA SOUTH AFRICAN BC Meyerton	100kW:DS-RADIO ORION 100kW:RADIO SUID-AFRIKA
3320.4	**BOLIVIA** RADIO SAN MIGUEL Riberalta	0.5kW:DS Irr::0.5kW:DS
3322v	**ECUADOR** RADIO SANGAY Macas	DS
3324.8	**GUATEMALA** R MAYA DE BARILLAS Huehuetenango	1kW:DS-SPANISH, ETC
3325	**BRAZIL** RADIO LIBERAL Belém	5kW:DS
	RDIF UNIVERSITARIA Guarulhos	1kW:DS
	INDONESIA R REP INDONESIA Palangkaráya,Kali'n	10kW:DS
	PAPUA NEW GUINEA R NORTH SOLOMONS Kieta	10kW:DS
3325v	**ECUADOR** ONDAS QUEVEDENAS Quevedo	Irr::1.5kW:DS
3326	**NIGERIA** RADIO NIGERIA Lagos	50kW:DS-1/ENGLISH, ETC
3329.6	**PERU** ONDAS DEL HUALLAGA Huánuco	Alternative Frequency to 3330.4kHz
3330	**CHINA (PR)** VO THE STRAIT-PLA Fuzhou	TAIWAN-2
	RWANDA R REP RWANDAISE Kigali	5/50kW:DS-FRENCH, ETC Sa/Su:5/50kW:DS-FRENCH, ETC Su:5/50kW:DS-FRENCH, ETC
3330.4	**PERU** ONDAS DEL HUALLAGA Huánuco	Alt 3329.6kHz:0.5kW:DS Alt 3329.6kHz:Su:0.5kW:DS
3331v	**COMOROS** RADIO COMORO Moroni	4kW:DS-FRENCH, ETC
3335	**BRAZIL** RADIO ALVORADA Londrina	5kW:DS Tu-Su:5kW:DS
	CHINA (TAIWAN) CENTRAL BC SYSTEM Taipei	10kW:PRC-5
	PAPUA NEW GUINEA RADIO EAST SEPIK Wewak	10kW:DS Irr::10kW:DS
3338v	**MOZAMBIQUE** EP DA ZAMBEZIA Quelimane	0.3kW:DS
3339.5	**PERU** RADIO ALTURA Cerro de Pasco	DS Irr:::DS
3340.2	**BOLIVIA** RADIO VILOCO Viloco	1kW:DS-SPANISH, ETC Irr:Su/M:1kW:DS-SPANISH, ETC
3345	**INDIA** RADIO KASHMIR Jammu	2kW:DS-ENGLISH, ETC
(con'd)	**INDONESIA** R REP INDONESIA Ternate, Maluku	10kW:DS



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Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
3345 (con'd)	PAPUA NEW GUINEA RADIO NORTHERN Popondetta	2kW:DS-ENGLISH, ETC
3346	ZAMBIA RADIO ZAMBIA-ZBS Lusaka	50/120kW:DS-ENGLISH, ETC F/Sa:50/120kW:DS-ENGLISH, ETC
3346v	ANGOLA ER DO HUAMBO Huambo	Irr::10kW:DS
3349.4	BOLIVIA RADIO 27 DICIEMBRE Villa Montes	1kW:DS Irr::1kW:DS Tu-Su:1kW:DS Irr:Tu-Su:1kW:DS
3350	GHANA GHANA BC CORP Accra	Irr::10kW:DS-1/ENGLISH ETC
	KOREA (DPR) SOUTH PYONGYANG PS Pyŏngsong	DS
3354v	ANGOLA RADIO NACIONAL Luanda	DS-A
3355	INDIA ALL INDIA RADIO Kurseong	20kW:DS-ENGLISH, ETC
	NEW CALEDONIA RFO-N CALEDONIE Nouméa	20kW:DS:PAC
	PAPUA NEW GUINEA RADIO SIMBU Kundiawa	2kW:DS
3355v	INDONESIA R REP INDONESIA Jambi, Sumatera	Irr::7.5kW:DS
3356	BOTSWANA RADIO BOTSWANA Gaborone	50kW:DS-ENGLISH, ETC
3360	ECUADOR RADIO FEDERACION Sucúa	10kW:DS-SPANISH, ETC M-W:10kW:DS-SPANISH, ETC Tu-Su:10kW:DS-SPANISH, ETC Irr:Tu-Su:10kW:DS-SPANISH, ETC
	GUATEMALA LA VOZ DE NAHUALA Nahualá	0.5/1kW:DS-SPANISH, ETC Su:0.5/1kW:DS-SPANISH, ETC
	INDONESIA UNIDENTIFIED	DS
	PAPUA NEW GUINEA RADIO MILNE BAY Alotau	Alt 3365kHz:10kW:DS-ENGLISH, ETC
3365	BRAZIL RADIO CULTURA Araraquara	1kW:DS
	INDIA ALL INDIA RADIO Delhi	10kW:DS-ENGLISH, ETC
	PAPUA NEW GUINEA RADIO MILNE BAY Alotau	Alternative Frequency to 3360kHz
	SWAZILAND TRANS WORLD RADIO Manzini	Alternative Frequency to 4760kHz
3366	GHANA GHANA BC CORP Accra	50kW:DS-2
3370	GUATEMALA RADIO TEZULUTLAN Cobán	1/5kW:DS
3370v	MADAGASCAR R MADAGASAKIRA Antananarivo	Irr:::DS
	MOZAMBIQUE EP DE SOFALA Beira	10kW:DS-1

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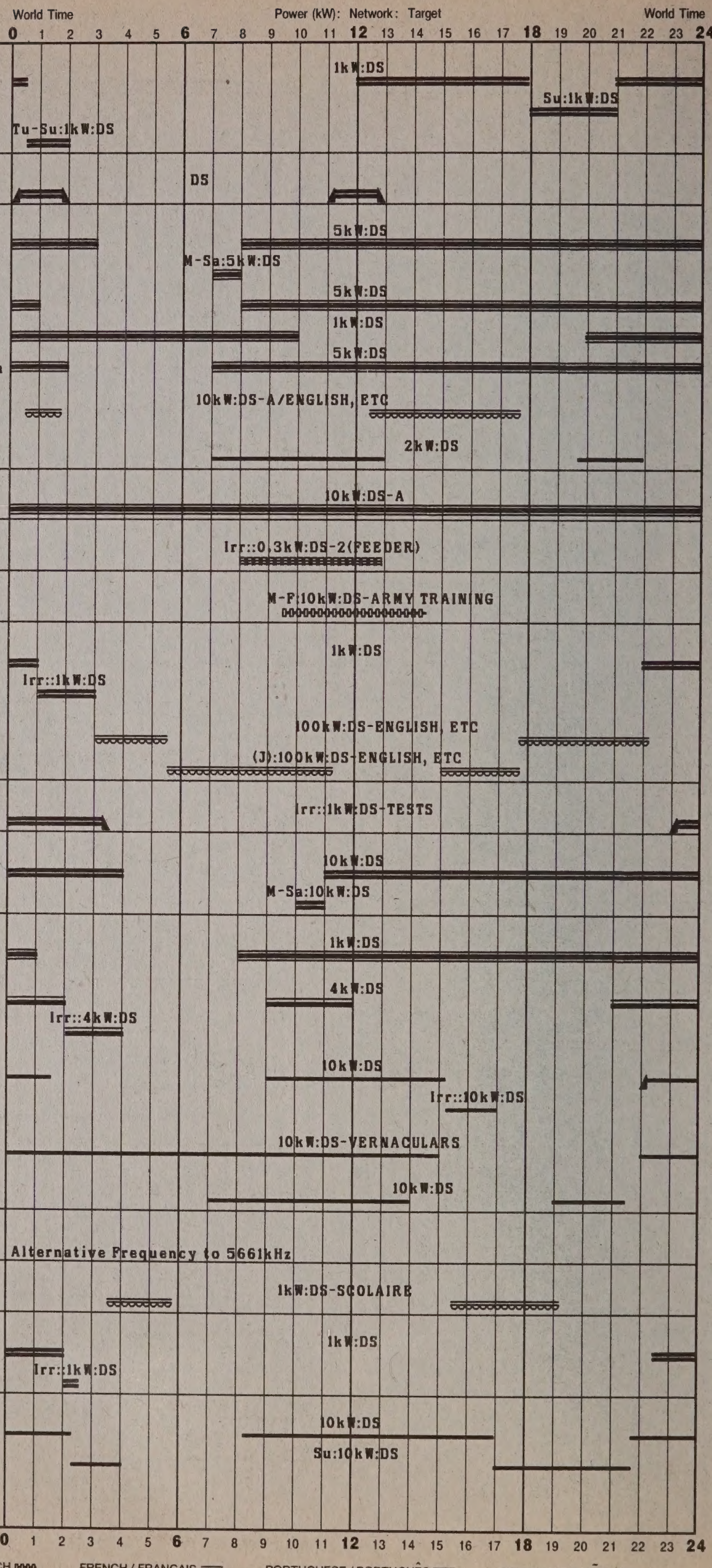

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
3370.5	**BOLIVIA** RADIO FLORIDA Samaipata	1kW:DS Su:1kW:DS Tu-Su:1kW:DS
3372.3	**BOLIVIA** RADIO NUEVO MUNDO Sucre	DS
3375	**BRAZIL** RADIO DOURADOS Dourados	5kW:DS M-Sa:5kW:DS
	RADIO EDUCADORA Guajará Mirim	5kW:DS
	RADIO EQUATORIAL Macapá	1kW:DS
	RADIO NACIONAL S Gabriel Cachoeira	5kW:DS
	INDIA ALL INDIA RADIO Gauhati	10kW:DS-A/ENGLISH, ETC
	PAPUA NEW GUINEA R WESTERN HIGHLAND Mount Hagen	2kW:DS
3375v	**ANGOLA** RADIO NACIONAL Luanda	10kW:DS-A
3377.5	**JAPAN** NIPPON HOSO KYOKAI Osaka-Mihara	Irr::0.3kW:DS-2(FEEDER)
3378	**AUSTRIA** SCHULUNGSSENDER Vienna	M-F:10kW:DS-ARMY TRAINING
3380	**GUATEMALA** RADIO CHORTIS Jocotán	1kW:DS Irr::1kW:DS
	MALAWI MALAWI BC CORP Limbe	100kW:DS-ENGLISH, ETC (J):100kW:DS-ENGLISH, ETC
3380.3	**BOLIVIA** RADIO CUMBRE Tazna	Irr::1kW:DS-TESTS
3381	**ECUADOR** RADIO IRIS Esmeraldas	10kW:DS M-Sa:10kW:DS
3385	**BRAZIL** R EDUCACAO RURAL Tefé	1kW:DS
	FRENCH GUIANA RFO-GUYANE Cayenne	4kW:DS Irr::4kW:DS
	INDONESIA R REP INDONESIA Kupang, Timur	10kW:DS Irr::10kW:DS
	MALAYSIA RTM-SARAWAK Miri	10kW:DS-VERNACULARS
	PAPUA NEW GUINEA R EAST NEW BRITAIN Rabaul	10kW:DS
3390	**PERU** LA VOZ DE CUTERVO Cutervo	Alternative Frequency to 5661kHz
	ZAIRE RADIO CANDIP Bunia	1kW:DS-SCOLAIRE
3390.2	**BOLIVIA** RADIO CAMARGO Camargo	1kW:DS Irr::1kW:DS
3395 (con'd)	**INDONESIA** R REP INDONESIA Tanjungkarang, Sum	10kW:DS Su:10kW:DS

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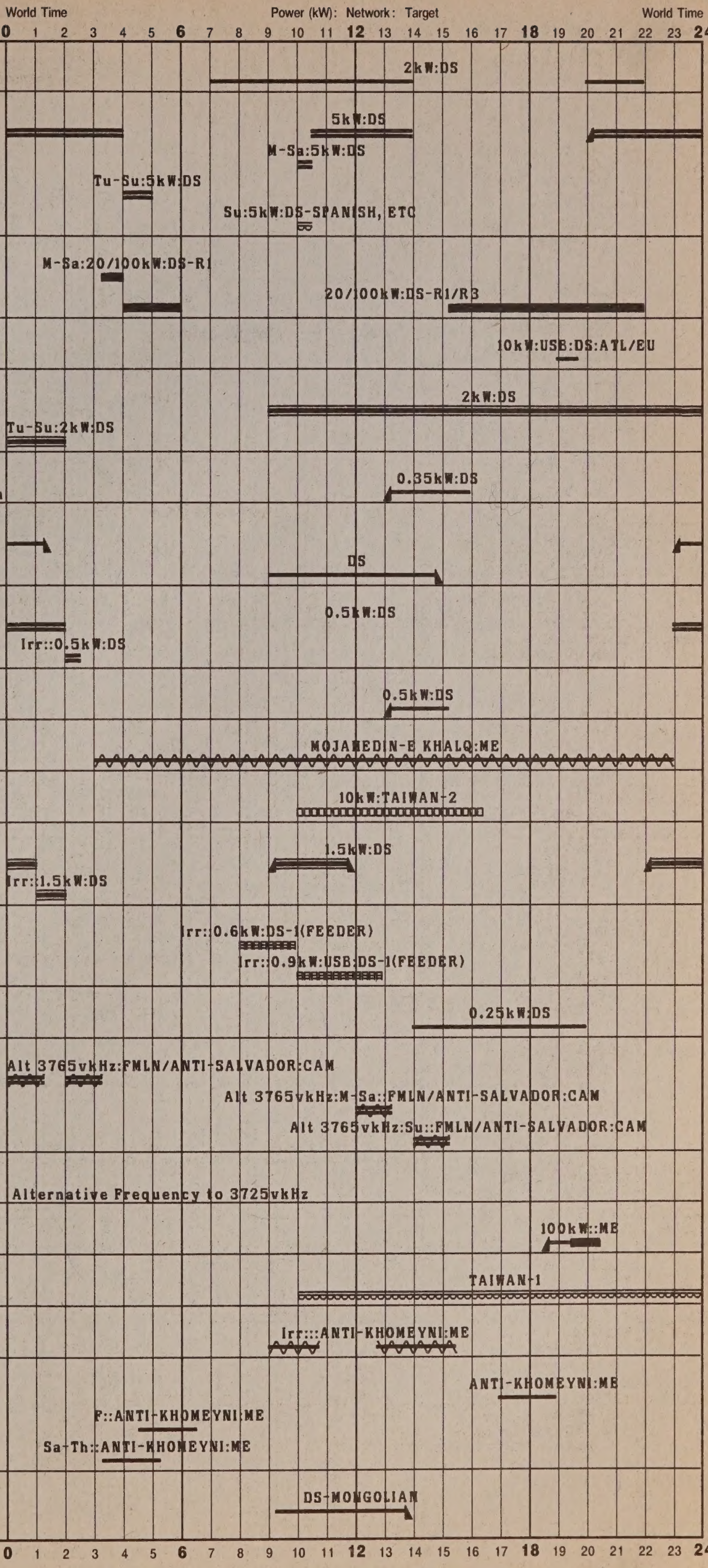

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
3395 (con'd)	PAPUA NEW GUINEA EASTERN HIGHLANDS Goroka	2kW:DS
3395v	ECUADOR RADIO ZARACAY Santo Domingo	5kW:DS M-Sa:5kW:DS Tu-Su:5kW:DS Su:5kW:DS-SPANISH, ETC
3396v	ZIMBABWE ZIMBABWE BC CORP Gweru	M-Sa:20/100kW:DS-R1 20/100kW:DS-R1/R3
3400	ICELAND RIKISUTVARPID Reykjavik	10kW:USB:DS:ATL/EU
3401v	BRAZIL EDUCADORA 6 AGOSTO Xapurí	2kW:DS Tu-Su:2kW:DS
3458.3	INDONESIA RPD LEBAK Rangkasbitung,Jawa	0.35kW:DS
3460v	INDONESIA RPD ACEH TIMUR Langsa, Sumatera	DS
3475v	BOLIVIA RADIO PADILLA Padilla	0.5kW:DS Irr::0.5kW:DS
3478.6	INDONESIA RPD KETAPANG Ketapang, Kalim'n	0.5kW:DS
3510v	CLANDESTINE (M EAST) 'VO THE CRUSADER' Eastern Iraq	MOJAHEDIN-E KHALQ:ME
3535	CHINA (PR) VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-2
3569v	BRAZIL RADIO 3 DE JULHO Brasiléia	1.5kW:DS Irr::1.5kW:DS
3607.5	JAPAN NIPPON HOSO KYOKAI Hiroshima-Gion NIPPON HOSO KYOKAI Tōkyō-Shobu	Irr::0.6kW:DS-1(FEEDER) Irr::0.9kW:USB:DS-1(FEEDER)
3644.8	INDONESIA R REP INDONESIA Fak Fak, Irian Jaya	0.25kW:DS
3725v	CLANDESTINE (C AMER) 'RADIO VENCEREMOS' Morazán, Salvador	Alt 3765vkHz:FMLN/ANTI-SALVADOR:CAM Alt 3765vkHz:M-Sa::FMLN/ANTI-SALVADOR:CAM Alt 3765vkHz:Su::FMLN/ANTI-SALVADOR:CAM
3765v	CLANDESTINE (C AMER) 'RADIO VENCEREMOS' Morazán, Salvador	Alternative Frequency to 3725vkHz
3778v	IRAN VO THE ISLAMIC REP Tehrān	100kW::ME
3815	CHINA (PR) CHINESE PEOPLES BS	TAIWAN-1
3880v	CLANDESTINE (M EAST) 'VO IRANIAN REV' Afghanistan (tent)	Irr:::ANTI-KHOMEYNI:ME
3885v	CLANDESTINE (M EAST) 'VO IRAN COMMUNIST Afghanistan (tent)	ANTI-KHOMEYNI:ME F::ANTI-KHOMEYNI:ME Sa-Th::ANTI-KHOMEYNI:ME
3900	CHINA (PR) +NEI MONGGOL PBS Hailar	DS-MONGOLIAN

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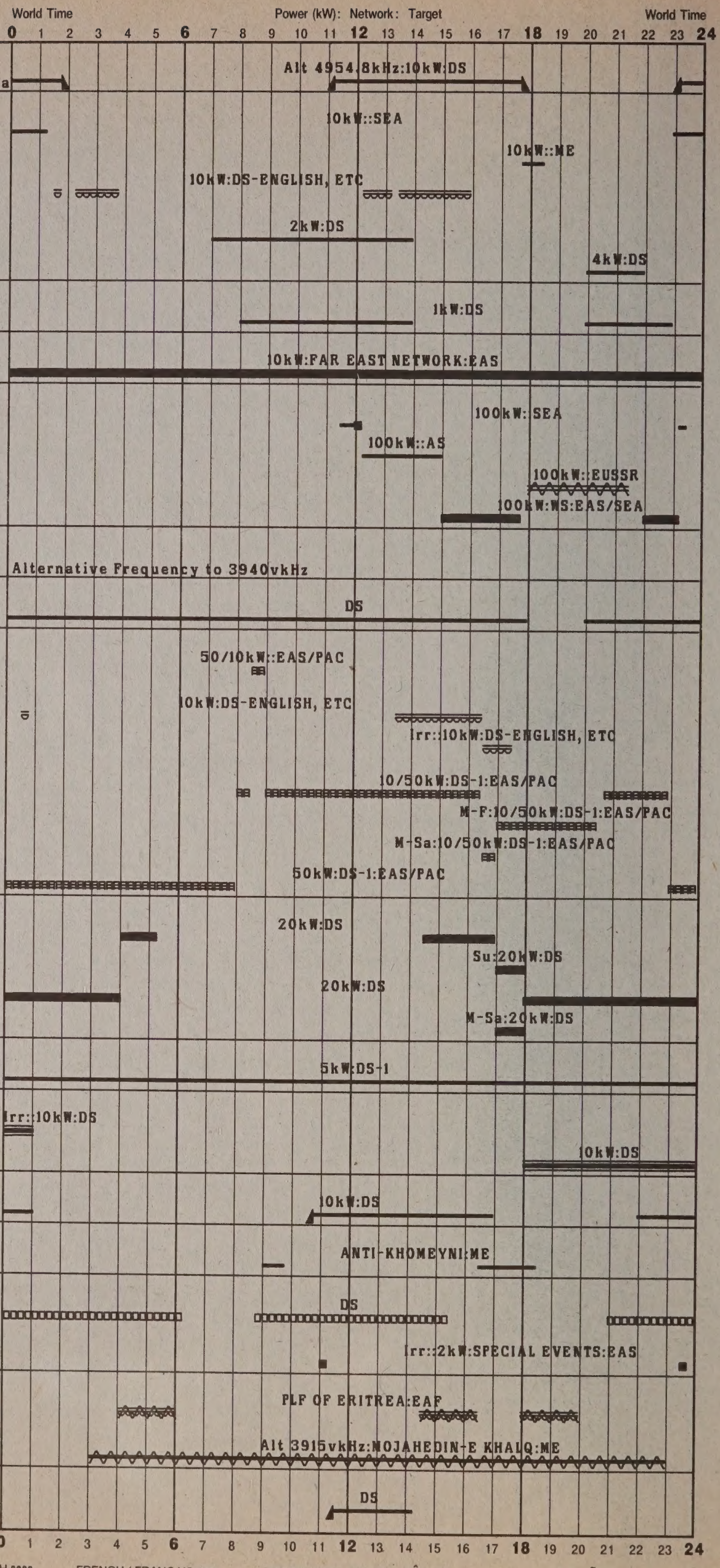

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
3904.8	**INDONESIA** R REP INDONESIA Banda Aceh, Sumat'a	Alt 4954.8kHz:10kW:DS
3905	**INDIA** ALL INDIA RADIO Delhi	10kW::SEA 10kW::ME 10kW:DS-ENGLISH, ETC
	PAPUA NEW GUINEA RADIO NEW IRELAND Kavieng	2kW:DS 4kW:DS
3905.2	**INDONESIA** R REP INDONESIA Merauke, IrianJaya	1kW:DS
3910	**USA** AFRTS-US MILITARY Via Tōkyō, Japan	10kW:FAR EAST NETWORK:EAS
3915	**UNITED KINGDOM** BBC Via Singapore	100kW::SEA 100kW::AS 100kW::EUSSR 100kW:WS:EAS/SEA
3915v	**CLANDESTINE (M EAST)** 'VO THE CRUSADER' Eastern Iraq	Alternative Frequency to 3940vkHz
3920	**KOREA (DPR)** NORTH PYONGYANG PS Sinŭiju	DS
3925	**CANADA** RADIO CANADA INTL Via Japan	50/10kW::EAS/PAC
	INDIA ALL INDIA RADIO Delhi	10kW:DS-ENGLISH, ETC Irr::10kW:DS-ENGLISH, ETC
	JAPAN NIHON SHORTWAVE BC Multiple Locations	10/50kW:DS-1:EAS/PAC M-F:10/50kW:DS-1:EAS/PAC M-Sa:10/50kW:DS-1:EAS/PAC
	NIHON SHORTWAVE BC Tōkyō-Nagara	50kW:DS-1:EAS/PAC
3927.4	**SOUTH AFRICA** CAPITAL RADIO Umtata	20kW:DS Su:20kW:DS
	SOUTHERN SOUND Umtata	20kW:DS M-Sa:20kW:DS
3930	**KOREA (REPUBLIC)** KOREAN BC SYSTEM Suwŏn	5kW:DS-1
3931v	**CAPE VERDE** RADIO NACIONAL Mindelo,São Vicente	Irr::10kW:DS 10kW:DS
3935	**INDONESIA** R REP INDONESIA Semarang, Jawa	10kW:DS
3935v	**CLANDESTINE (M EAST)** 'VO THE MARTYRS' Near Iran	ANTI-KHOMEYNI:ME
3940	**CHINA (PR)** HUBEI PEOPLES BS Wuhan	DS
	HONG KONG RTV HONG KONG Kowloon	Irr::2kW:SPECIAL EVENTS:EAS
3940v	**CLANDESTINE (AFRICA)** 'VO BROAD MASSES' Argadom, Ethiopia	PLF OF ERITREA:EAF
	CLANDESTINE (M EAST) 'VO THE CRUSADER' Eastern Iraq	Alt 3915vkHz:MOJAHEDIN-E KHALQ:ME
3945 (con'd)	**INDONESIA** R REP INDONESIA	DS

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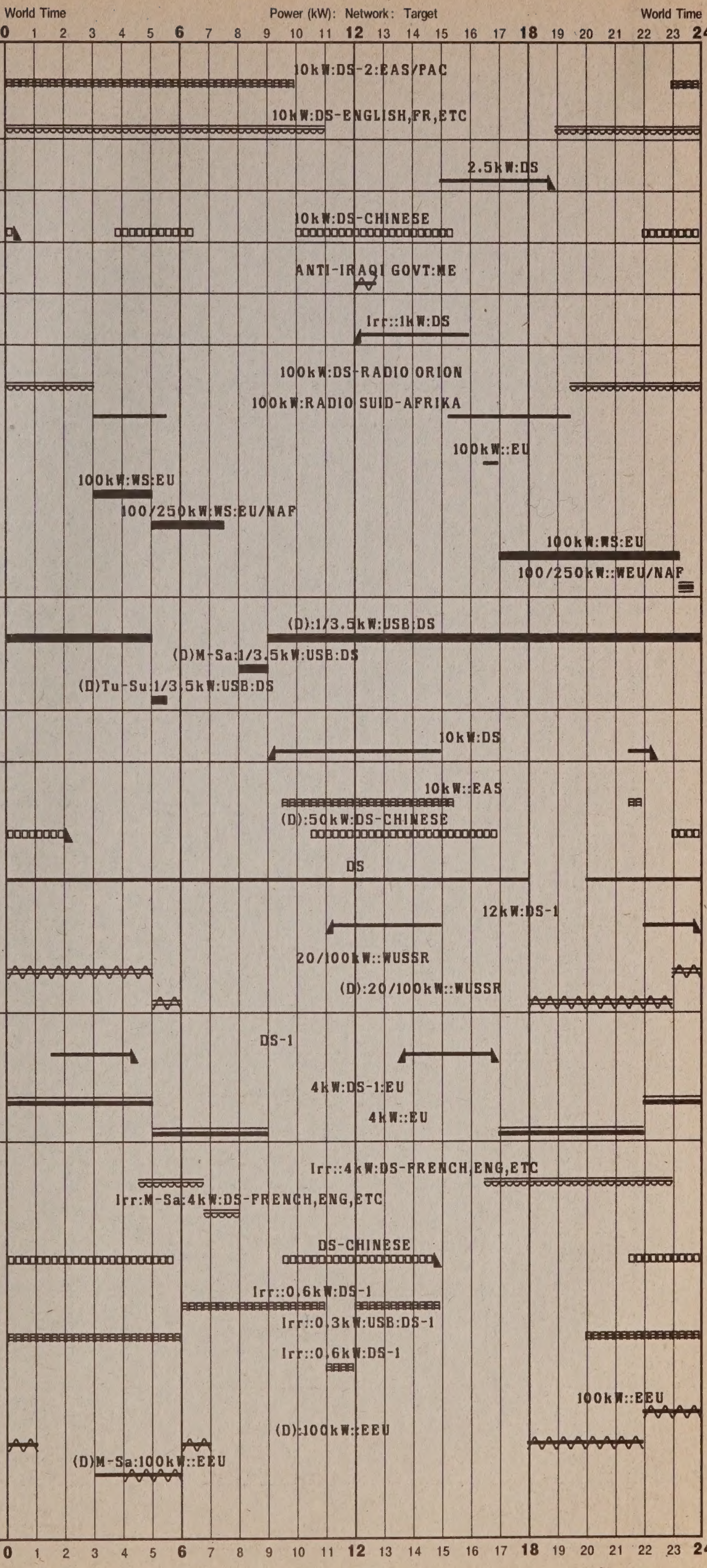
3945 (con'd)	**JAPAN** NIHON SHORTWAVE BC Tōkyō-Nagara	10kW:DS-2:EAS/PAC
	VANUATU RADIO VANUATU Vila, Efate Island	10kW:DS-ENGLISH,FR,ETC
3945.8	**INDONESIA** R REP INDONESIA Tanjungkarang, Sum	2.5kW:DS
3950	**CHINA (PR)** QINGHAI PEOPLES BS Xining	10kW:DS-CHINESE
3950v	**CLANDESTINE (M EAST)** "VO IRAQI KURDS"	ANTI-IRAQI GOVT:ME
3953	**INDONESIA** R REP INDONESIA Bogor, Jawa	Irr::1kW:DS
3955	**SOUTH AFRICA** SOUTH AFRICAN BC Meyerton	100kW:DS-RADIO ORION 100kW:RADIO SUID-AFRIKA
	UNITED KINGDOM BBC Daventry	100kW::EU
	BBC Multiple Locations	100kW:WS:EU 100/250kW:WS:EU/NAF 100kW:WS:EU
	BBC Skelton, Cumbria	100/250kW::WEU/NAF
3958	**FALKLAND ISLANDS** FALKLAND IS BC STN Stanley	(D):1/3.5kW:USB:DS (D)M-Sa:1/3.5kW:USB:DS (D)Tu-Su:1/3.5kW:USB:DS
3959.8	**INDONESIA** R REP INDONESIA Palu, Sulawesi	10kW:DS
3960	**CHINA (PR)** RADIO BEIJING Beijing	10kW::EAS
	XINJIANG PBS Urümqi	(D):50kW:DS-CHINESE
	KOREA (DPR) CHAGONG PROVINCIAL Kanggye	DS
	MONGOLIA RADIO ULAN BATOR Dalandzadgad	12kW:DS-1
	USA RFE-RL Via Germany (FR)	20/100kW::WUSSR (D):20/100kW::WUSSR
3965	**AFGHANISTAN** RADIO AFGHANISTAN Via USSR	DS-1
	FRANCE FRANCE-INTER Issoudun-Allouis	4kW:DS-1:EU
	RADIO FRANCE INTL Issoudun-Allouis	4kW::EU
3970	**CAMEROON** RADIO CAMEROON Buea	Irr::4kW:DS-FRENCH,ENG,ETC Irr:M-Sa:4kW:DS-FRENCH,ENG,ETC
	CHINA (PR) NEI MONGGOL PBS Hohhot	DS-CHINESE
	JAPAN NIPPON HOSO KYOKAI Matsuyama-Harita	Irr::0.6kW:DS-1
	NIPPON HOSO KYOKAI Nagoya-Nabeta	Irr::0.3kW:USB:DS-1
	NIPPON HOSO KYOKAI Sapporo-Ebetsu	Irr::0.6kW:DS-1
	USA RFE-RL Via Biblis, GFR	100kW::EEU (D):100kW::EEU (D)M-Sa:100kW::EEU
(con'd)		



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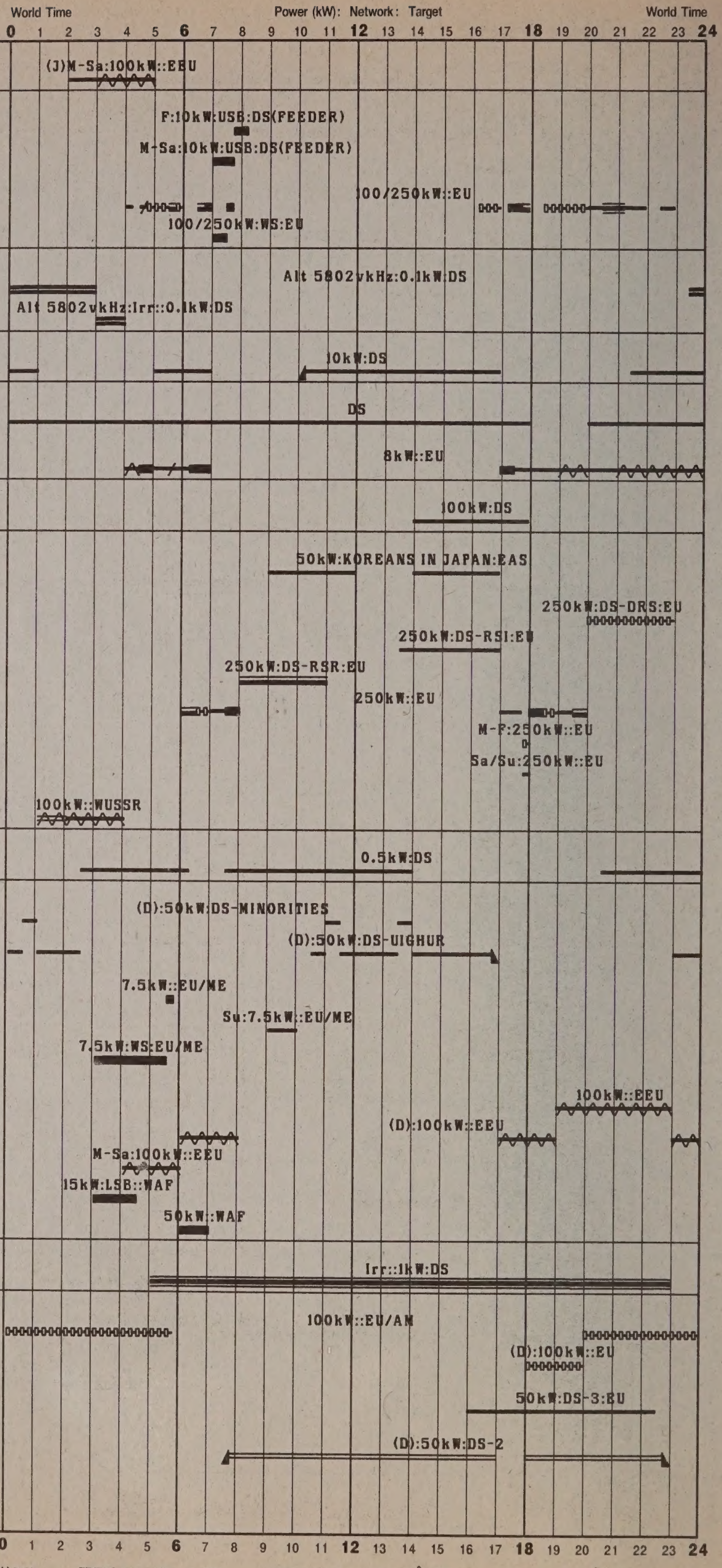
3970 (con'd)	USA RFE-RL Via Biblis, GFR	(J)M-Sa:100kW::EEU
3975	LIBERIA LRCN Monrovia	F:10kW:USB:DS(FEEDER) M-Sa:10kW:USB:DS(FEEDER)
	UNITED KINGDOM BBC Skelton, Cumbria	100/250kW::EU 100/250kW:WS:EU
3975v	PERU FREC SAN IGNACIO San Ignacio	Alt 5802vkHz:0.1kW:DS Alt 5802vkHz:Irr::0.1kW:DS
3976v	INDONESIA R REP INDONESIA Surabaya, Jawa	10kW:DS
3980	KOREA (DPR) NORTH HAMGYONG PS Ch'ŏngjin	DS
	USA VOICE OF AMERICA Via Ismaning, GFR	8kW::EU
3980v	PAKISTAN PAKISTAN BC CORP Islamabad	100kW:DS
3985	CLANDESTINE (ASIA) "ECHO OF HOPE" Suwŏn	50kW:KOREANS IN JAPAN:EAS
	SWITZERLAND SWISS BC CORP Beromünster	250kW:DS-DRS:EU 250kW:DS-RSI:EU 250kW:DS-RSR:EU
	SWISS RADIO INTL Beromünster	250kW::EU M-F:250kW::EU Sa/Su:250kW::EU
	USA RFE-RL Via Biblis, GFR	100kW::WUSSR
3986.3	INDONESIA R REP INDONESIA Manokwari, Irian	0.5kW:DS
3990	CHINA (PR) CENTRAL PEOPLES BS Urümqi	(D):50kW:DS-MINORITIES
	XINJIANG PBS Urümqi	(D):50kW:DS-UIGHUR
	CYPRUS BBC Zyyi	7.5kW::EU/ME Su:7.5kW::EU/ME 7.5kW:WS:EU/ME
	USA RFE-RL Via Biblis, GFR	100kW::EEU (D):100kW::EEU M-Sa:100kW::EEU
	VOICE OF AMERICA Via M'rovia, Liberia	15kW:LSB::WAF 50kW::WAF
3994v	ANGOLA ER DA HUILA Lubango	Irr::1kW:DS
3995	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::EU/AM (D):100kW::EU
	ITALY RTV ITALIANA Rome	50kW:DS-3:EU
(con'd)	USSR RADIO MOSCOW Khabarovsk	(D):50kW:DS-2



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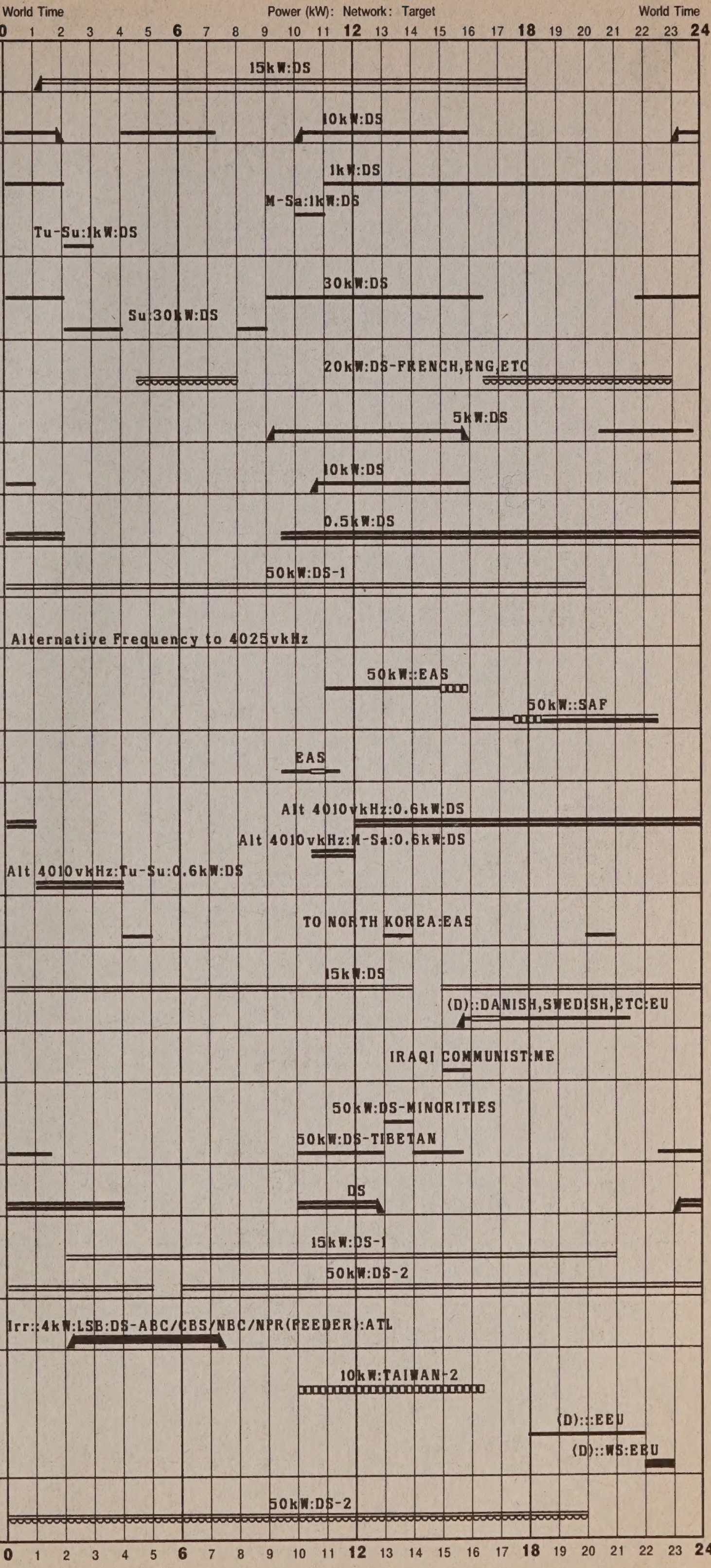

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
3995 (con'd)	**USSR** TUVIN RADIO Kyzyl	15kW:DS
3995.2	**INDONESIA** R REP INDONESIA Pontianak, Kalim'n	10kW:DS
3999	**GREENLAND** KALAALLIT NUNAATA Nuuk	1kW:DS M-Sa:1kW:DS Tu-Su:1kW:DS
3999v	**VIETNAM** VOICE OF VIETNAM Hanoi	30kW:DS Su:30kW:DS
4000v	**CAMEROON** RADIO CAMEROON Bafoussam	20kW:DS-FRENCH,ENG,ETC
4000.2	**INDONESIA** R REP INDONESIA Kendari, Sulawesi	5kW:DS
4002.7	**INDONESIA** R REP INDONESIA Padang, Sumatera	10kW:DS
4005	**PERU** RADIO GRAU Huancabamba	0.5kW:DS
4010	**USSR** KIRGHIZ RADIO Frunze, Kirgiziya	50kW:DS-1
4010v	**PERU** FRECUENCIA POPULAR Rioja	Alternative Frequency to 4025vkHz
4020	**CHINA (PR)** RADIO BEIJING Beijing	50kW::EAS 50kW::SAF
4025	**USSR** RADIO MOSCOW/RP&P Vladivostok	EAS
4025v	**PERU** FRECUENCIA POPULAR Rioja	Alt 4010vkHz:0.6kW:DS Alt 4010vkHz:M-Sa:0.6kW:DS Alt 4010vkHz:Tu-Su:0.6kW:DS
4026v	**CLANDESTINE (ASIA)** "VO THE PEOPLE" South Korea	TO NORTH KOREA:EAS
4030	**USSR** CHUKOT RADIO Anadyr' RADIO MOSCOW/RP&P	15kW:DS (D)::DANISH,SWEDISH,ETC:EU
4030v	**CLANDESTINE (M EAST)** "VO IRAQI PEOPLE"	IRAQI COMMUNIST:ME
4035	**CHINA (PR)** CENTRAL PEOPLES BS Lhasa XIZANG PEOPLES BS Lhasa	50kW:DS-MINORITIES 50kW:DS-TIBETAN
4039.3	**PERU** RADIO MARGINAL Prov Tocache	DS
4040	**USSR** ARMENIAN RADIO Yerevan RADIO MOSCOW Vladivostok	15kW:DS-1 50kW:DS-2
4042	**USA** AFRTS-US MILITARY Via Barford, UK	Irr::4kW:LSB:DS-ABC/CBS/NBC/NPR(FEEDER):ATL
4045	**CHINA (PR)** VO THE STRAIT-PLA Fuzhou **USSR** RADIO MOSCOW/RP&P Moscow	10kW:TAIWAN-2 (D)::EEU (D)::WS:EEU
4050 (con'd)	**USSR** KIRGHIZ RADIO Frunze	50kW:DS-2

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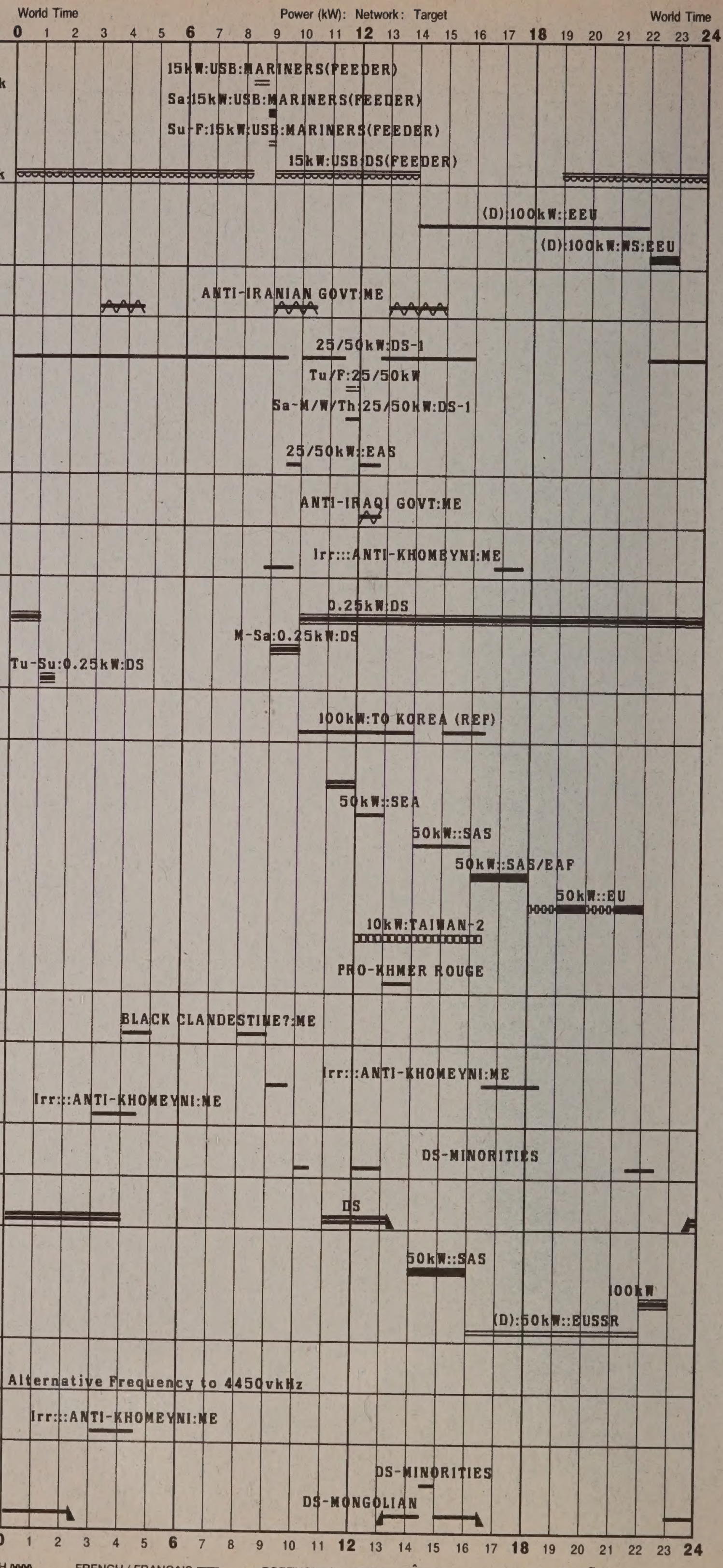
4050 (con'd)	USSR RADIO TIKHIY OKEAN Yuzhno-Sakhalinsk	15kW:USB:MARINERS(FEEDER) Sa:15kW:USB:MARINERS(FEEDER) Su-F:15kW:USB:MARINERS(FEEDER)
	SAKHALIN RADIO Yuzhno-Sakhalinsk	15kW:USB:DS(FEEDER)
4060	USSR RADIO MOSCOW/RP&P Ryazan'	(D):100kW::EEU (D):100kW:WS:EEU
4065v	CLANDESTINE (M EAST) "VO IRANIAN KURDS"	ANTI-IRANIAN GOVT:ME
4080	MONGOLIA RADIO ULAN BATOR Ulan Bator	25/50kW:DS-1 Tu/F:25/50kW Sa-M/W/Th:25/50kW:DS-1
	USSR RADIO MOSCOW/RP&P Via Ulan Bator	25/50kW::EAS
4080v	CLANDESTINE (M EAST) "VO IRAQI KURDS"	ANTI-IRAQI GOVT:ME
4110v	CLANDESTINE (M EAST) "VO THE MARTYRS" Near Iran	Irr:::ANTI-KHOMEYNI:ME
4117v	BRAZIL RADIO DIFUSORA Sena Madureira	0.25kW:DS M-Sa:0.25kW:DS Tu-Su:0.25kW:DS
4119v	CLANDESTINE (ASIA) "VO NAT SALVATION" Haeju, Korea (DPR)	100kW:TO KOREA (REP)
4130	CHINA (PR) RADIO BEIJING	
	RADIO BEIJING Beijing	50kW::SEA 50kW::SAS 50kW::SAS/EAF 50kW::EU
	VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-2
	CLANDESTINE (ASIA) "VO DEM KAMPUCHEA" China (PR)	PRO-KHMER ROUGE
4145	CLANDESTINE (M EAST) "VO IRANIAN KURDS"	BLACK CLANDESTINE?:ME
4165v	CLANDESTINE (M EAST) "VO THE MARTYRS" Near Iran	Irr:::ANTI-KHOMEYNI:ME
	"VO THE WORKER" Near Iran	Irr:::ANTI-KHOMEYNI:ME
4190	CHINA (PR) CENTRAL PEOPLES BS	DS-MINORITIES
4194v	PERU RADIO UCHIZA Uchiza	DS
4200	CHINA (PR) RADIO BEIJING Beijing	50kW::SAS 100kW (D):50kW::EUSSR
4210v	CLANDESTINE (M EAST) "VO THE CRUSADER" Eastern Iraq	Alternative Frequency to 4450vkHz
4215	CLANDESTINE (M EAST) "VO THE WORKER" Near Iran	Irr:::ANTI-KHOMEYNI:ME
4220	CHINA (PR) CENTRAL PEOPLES BS Urûmqi	DS-MINORITIES
	XINJIANG PBS Urûmqi	DS-MONGOLIAN



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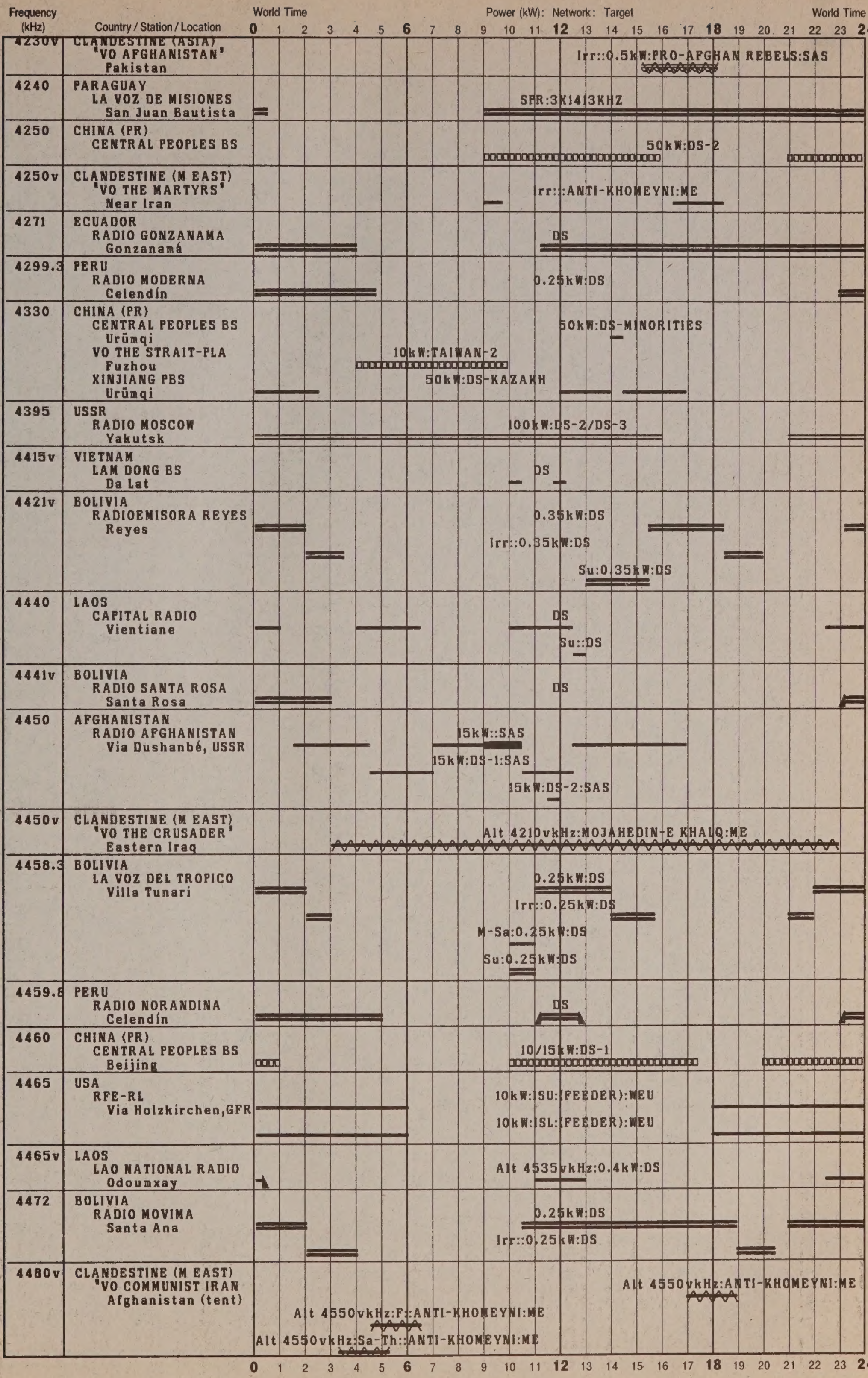

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4230v	CLANDESTINE (ASIA) 'VO AFGHANISTAN' Pakistan	Irr::0.5kW:PRO-AFGHAN REBELS:SAS
4240	PARAGUAY LA VOZ DE MISIONES San Juan Bautista	SPR:3X1413KHZ
4250	CHINA (PR) CENTRAL PEOPLES BS	50kW:DS-2
4250v	CLANDESTINE (M EAST) 'VO THE MARTYRS' Near Iran	Irr:::ANTI-KHOMEYNI:ME
4271	ECUADOR RADIO GONZANAMA Gonzanamá	DS
4299.3	PERU RADIO MODERNA Celendín	0.25kW:DS
4330	CHINA (PR) CENTRAL PEOPLES BS Urümqi VO THE STRAIT-PLA Fuzhou XINJIANG PBS Urümqi	50kW:DS-MINORITIES 10kW:TAIWAN-2 50kW:DS-KAZAKH
4395	USSR RADIO MOSCOW Yakutsk	100kW:DS-2/DS-3
4415v	VIETNAM LAM DONG BS Da Lat	DS
4421v	BOLIVIA RADIOEMISORA REYES Reyes	0.35kW:DS Irr::0.35kW:DS Su:0.35kW:DS
4440	LAOS CAPITAL RADIO Vientiane	DS Su::DS
4441v	BOLIVIA RADIO SANTA ROSA Santa Rosa	DS
4450	AFGHANISTAN RADIO AFGHANISTAN Via Dushanbé, USSR	15kW::SAS 15kW:DS-1:SAS 15kW:DS-2:SAS
4450v	CLANDESTINE (M EAST) 'VO THE CRUSADER' Eastern Iraq	Alt 4210vkHz:MOJAHEDIN-E KHALQ:ME
4458.3	BOLIVIA LA VOZ DEL TROPICO Villa Tunari	0.25kW:DS Irr::0.25kW:DS M-Sa:0.25kW:DS Su:0.25kW:DS
4459.8	PERU RADIO NORANDINA Celendín	DS
4460	CHINA (PR) CENTRAL PEOPLES BS Beijing	10/15kW:DS-1
4465	USA RFE-RL Via Holzkirchen,GFR	10kW:ISU:(FEEDER):WEU 10kW:ISL:(FEEDER):WEU
4465v	LAOS LAO NATIONAL RADIO Odoumxay	Alt 4535vkHz:0.4kW:DS
4472	BOLIVIA RADIO MOVIMA Santa Ana	0.25kW:DS Irr::0.25kW:DS
4480v	CLANDESTINE (M EAST) 'VO COMMUNIST IRAN Afghanistan (tent)	Alt 4550vkHz:ANTI-KHOMEYNI:ME Alt 4550vkHz:F::ANTI-KHOMEYNI:ME Alt 4550vkHz:Sa-Th::ANTI-KHOMEYNI:ME

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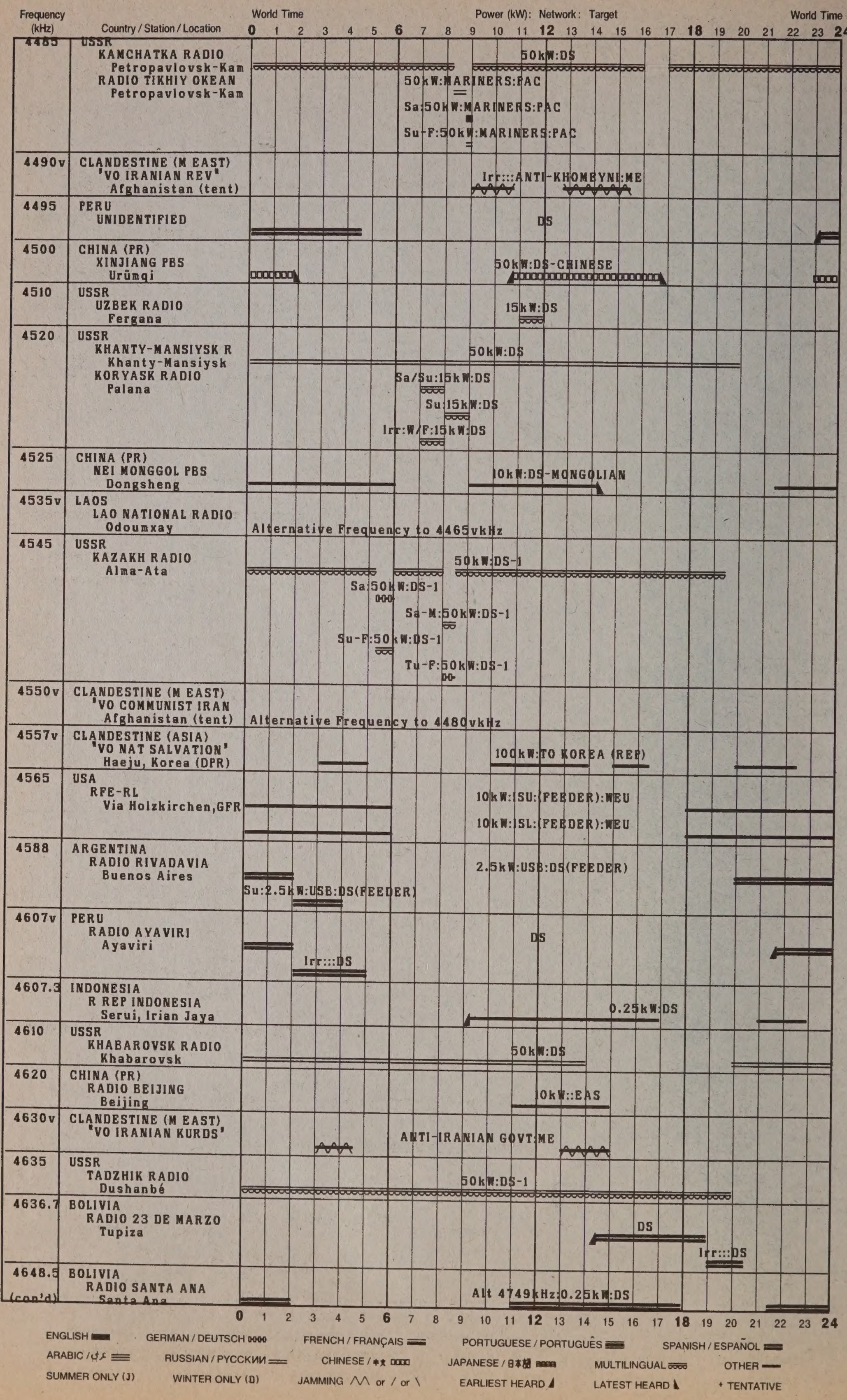
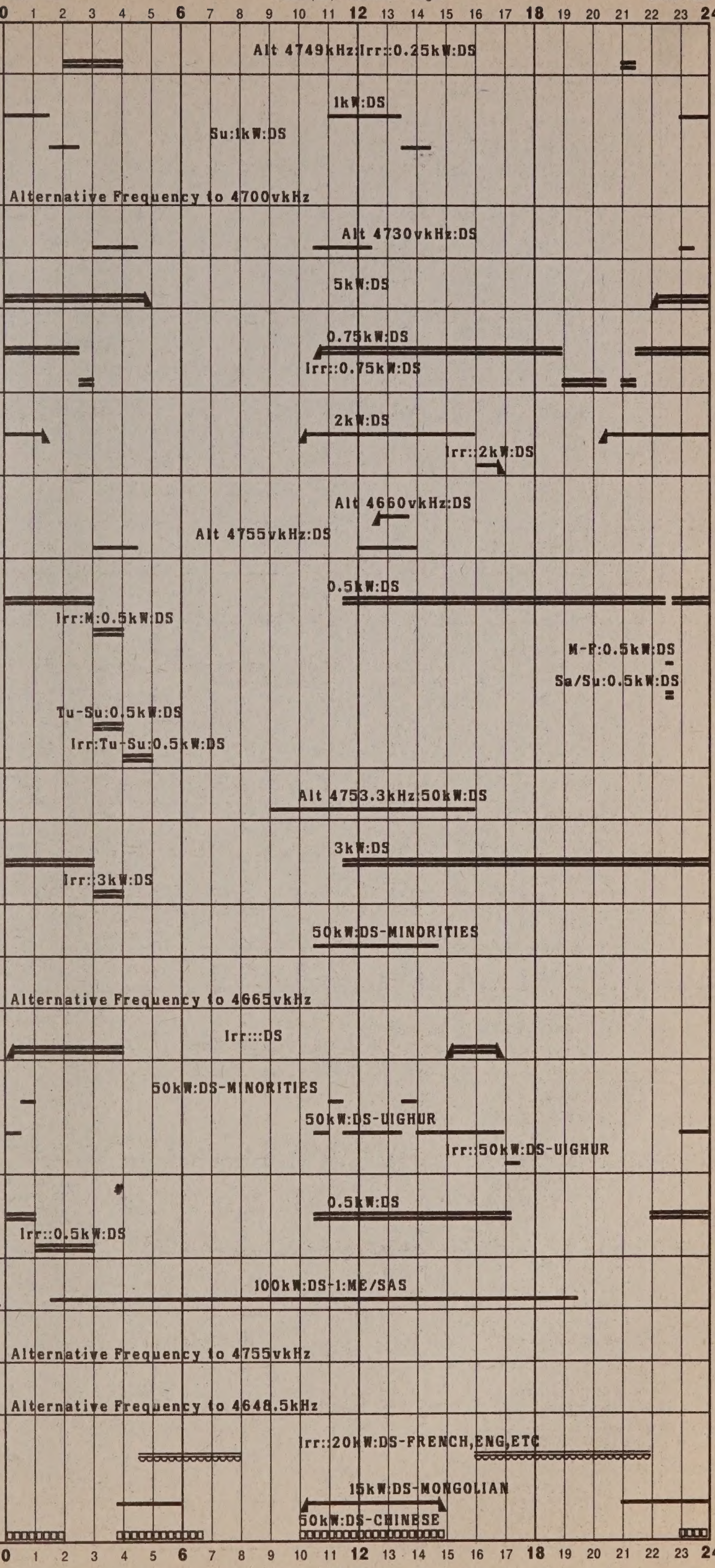


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4485	USSR KAMCHATKA RADIO Petropavlovsk-Kam RADIO TIKHIY OKEAN Petropavlovsk-Kam	50kW:DS 50kW:MARINERS:PAC Sa:50kW:MARINERS:PAC Su-F:50kW:MARINERS:PAC
4490v	CLANDESTINE (M EAST) 'VO IRANIAN REV' Afghanistan (tent)	Irr:::ANTI-KHOMEYNI:ME
4495	PERU UNIDENTIFIED	DS
4500	CHINA (PR) XINJIANG PBS Urümqi	50kW:DS-CHINESE
4510	USSR UZBEK RADIO Fergana	15kW:DS
4520	USSR KHANTY-MANSIYSK R Khanty-Mansiysk KORYASK RADIO Palana	50kW:DS Sa/Su:15kW:DS Su:15kW:DS Irr:W/F:15kW:DS
4525	CHINA (PR) NEI MONGGOL PBS Dongsheng	10kW:DS-MONGOLIAN
4535v	LAOS LAO NATIONAL RADIO Odoumxay	Alternative Frequency to 4465vkHz
4545	USSR KAZAKH RADIO Alma-Ata	50kW:DS-1 Sa:50kW:DS-1 Sa-M:50kW:DS-1 Su-F:50kW:DS-1 Tu-F:50kW:DS-1
4550v	CLANDESTINE (M EAST) 'VO COMMUNIST IRAN' Afghanistan (tent)	Alternative Frequency to 4480vkHz
4557v	CLANDESTINE (ASIA) 'VO NAT SALVATION' Haeju, Korea (DPR)	100kW:TO KOREA (REP)
4565	USA RFE-RL Via Holzkirchen,GFR	10kW:ISU:(FEEDER):WEU 10kW:ISL:(FEEDER):WEU
4588	ARGENTINA RADIO RIVADAVIA Buenos Aires	2.5kW:USB:DS(FEEDER) Su:2.5kW:USB:DS(FEEDER)
4607v	PERU RADIO AYAVIRI Ayaviri	DS Irr:::DS
4607.3	INDONESIA R REP INDONESIA Serui, Irian Jaya	0.25kW:DS
4610	USSR KHABAROVSK RADIO Khabarovsk	50kW:DS
4620	CHINA (PR) RADIO BEIJING Beijing	10kW::EAS
4630v	CLANDESTINE (M EAST) 'VO IRANIAN KURDS'	ANTI-IRANIAN GOVT:ME
4635	USSR TADZHIK RADIO Dushanbé	50kW:DS-1
4636.7	BOLIVIA RADIO 23 DE MARZO Tupiza	DS Irr:::DS
4648.5 (con'd)	BOLIVIA RADIO SANTA ANA Santa Ana	Alt 4749kHz:0.25kW:DS



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4648.5 (con'd)	BOLIVIA RADIO SANTA ANA Santa Ana	Alt 4749kHz:Irr::0.25kW:DS
4660v	LAOS LAO NATIONAL RADIO Houa Phan	1kW:DS Su:1kW:DS
	VIETNAM BINH TRI THIEN BS Hué	Alternative Frequency to 4700vkHz
4665v	VIETNAM GIA LAI-KON TUM BS Pleiku	Alt 4730vkHz:DS
4679.6	ECUADOR R NACIONAL ESPEJO Quito	5kW:DS
4682.2	BOLIVIA RADIO PAITITI Guayaramerín	0.75kW:DS Irr::0.75kW:DS
4700	INDONESIA RK INFORMASI PER'N Surabaya, Jawa	2kW:DS Irr::2kW:DS
4700v	VIETNAM BINH TRI THIEN BS Hué	Alt 4660vkHz:DS
	SON LA BC STATION Son La	Alt 4755vkHz:DS
4712v	BOLIVIA RADIO ABAROA Riberalta	0.5kW:DS Irr:M:0.5kW:DS M-F:0.5kW:DS Sa/Su:0.5kW:DS Tu-Su:0.5kW:DS Irr:Tu-Su:0.5kW:DS
4719.3	INDONESIA R REP INDONESIA Ujung Pandang,Sul'i	Alt 4753.3kHz:50kW:DS
4723v	BOLIVIA RADIO RIBERALTA Riberalta	3kW:DS Irr::3kW:DS
4725v	BURMA BURMA BC SERVICE Rangoon	50kW:DS-MINORITIES
4730v	VIETNAM GIA LAI-KON TUM BS Pleiku	Alternative Frequency to 4665vkHz
4732v	PERU RADIO SAN JUAN Caraz	Irr:::DS
4735	CHINA (PR) CENTRAL PEOPLES BS Urümqi	50kW:DS-MINORITIES
	XINJIANG PBS Urümqi	50kW:DS-UIGHUR Irr::50kW:DS-UIGHUR
4739.5	BOLIVIA RADIO MAMORE Guayaramerín	0.5kW:DS Irr::0.5kW:DS
4740	AFGHANISTAN RADIO AFGHANISTAN Via Ashkhabad,USSR	100kW:DS-1:ME/SAS
4746v	PERU RADIO HUANTA 2000 Huanta	Alternative Frequency to 4755vkHz
4749	BOLIVIA RADIO SANTA ANA Santa Ana	Alternative Frequency to 4648.5kHz
4750	CAMEROON RADIO CAMEROON Bertoua	Irr::20kW:DS-FRENCH,ENG,ETC
	CHINA (PR) NEI MONGGOL PBS	15kW:DS-MONGOLIAN
	XIZANG PEOPLES BS Lhasa	50kW:DS-CHINESE

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Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
4751v	ZAIRE LA VOIX DU ZAIRE Lubumbashi	Irr::10kW:DS-FRENCH, ETC
4753.2	UNIDENTIFIED	ISLAMIC STATION
4753.3	INDONESIA R REP INDONESIA Ujung Pandang,Sul'i	Alternative Frequency to 4719.3kHz
4755	BRAZIL R EDUCACAO RURAL Campo Grande	10kW:DS M-Sa:10kW:DS Tu-Su:10kW:DS
	RADIO DO MARANHAO São Luís	2kW:DS
	HONDURAS SANI RADIO Puerto Lempira	10kW:DS-SPANISH, ETC
4755v	PERU RADIO HUANTA 2000 Huanta	Alt 4746vkHz:1kW:DS Alt 4746vkHz:Irr::1kW:DS
	VIETNAM SON LA BC STATION Son La	Alternative Frequency to 4700vkHz
4760	CHINA (PR) YUNNAN PEOPLES BS Kunming	50kW:DS-1
	YUNNAN PEOPLES BS Ziyun, Guizhou	50kW:DS-1
	LIBERIA RADIO ELWA Monrovia	10kW:DS F-Su:10kW:DS M-Sa:10kW:DS Sa/Su:10kW:DS
	SWAZILAND TRANS WORLD RADIO Manzini	Alt 3365kHz:25/100kW::SAF (J):100kW::EAF (J):25kW::SAF
4762	ECUADOR EMISORA ATALAYA Guayaquil	5kW:DS Irr:Sa/Su:5kW:DS Tu-Su:5kW:DS
4762v	PERU RADIO INCA Lima	1.8kW:DS
4764	INDONESIA R REP INDONESIA Medan, Sumatera	50kW:DS Su:50kW:DS
4765	BOLIVIA RADIO HUANAY Huanay	1kW:DS
	BRAZIL RADIO NACIONAL Cruzeiro do Sul	10kW:DS Tu-Su:10kW:DS
	RADIO RURAL Santarém	10kW:DS
	USSR RADIO MOSCOW/RP&P Via Havana, Cuba	10kW::CA
4770	ANGOLA ER LUNDA NORTE Dundo-Luachimo	Irr::0.5kW:DS
	CHINA (PR) CENTRAL PEOPLES BS Beijing	15kW:TAIWAN-1
	NIGERIA RADIO NIGERIA Kaduna	50kW:DS-2/ENGLISH, ETC
	VENEZUELA RADIO MUNDIAL Ciudad Bolívar	Irr::1kW:DS

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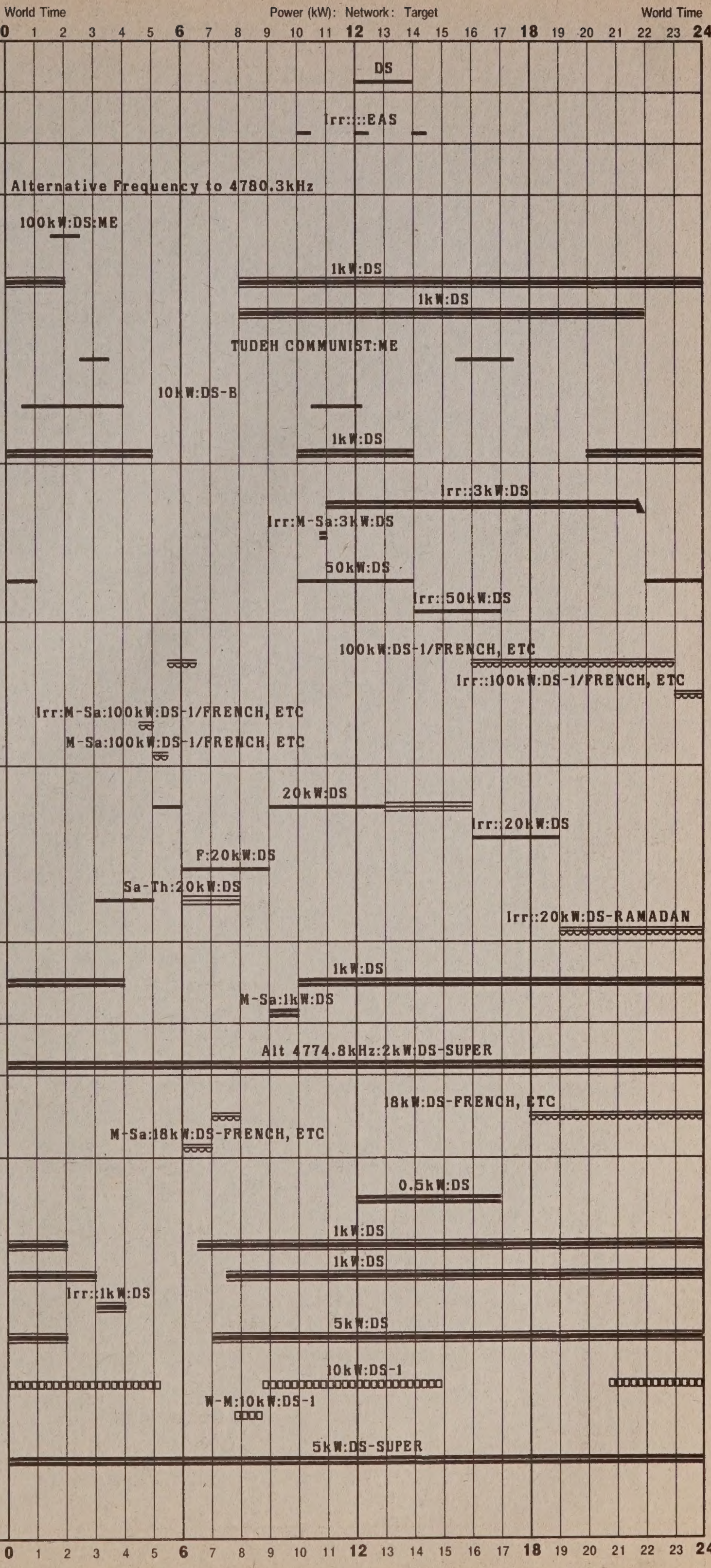
4770v	VIETNAM SON LA BC STATION Son La	DS
4771v	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	Irr:::EAS
4774.8	COLOMBIA RADIO SUPER Medellín	Alternative Frequency to 4780.3kHz
4775	AFGHANISTAN RADIO KABUL Kabul	100kW:DS:ME
	BRAZIL PORTAL DA AMAZONIA Cuiabá	1kW:DS
	RADIO CONGONHAS * Congonhas	1kW:DS
	CLANDESTINE (M EAST) "R IRAN TOILERS" Afghanistan	TUDEH COMMUNIST:ME
	INDIA ALL INDIA RADIO Gauhati	10kW:DS-B
	PERU RADIO TARMA Tarma	1kW:DS
4775v	BOLIVIA RADIO LOS ANDES Tarija	Irr::3kW:DS Irr:M-Sa:3kW:DS
	INDONESIA R REP INDONESIA Jakarta, Jawa	50kW:DS Irr::50kW:DS
4777	GABON RTV GABONAISE Libreville	100kW:DS-1/FRENCH, ETC Irr::100kW:DS-1/FRENCH, ETC Irr:M-Sa:100kW:DS-1/FRENCH, ETC M-Sa:100kW:DS-1/FRENCH, ETC
4780v	DJIBOUTI (JIBUTI) RTV DE DJIBOUTI Djibouti	20kW:DS Irr::20kW:DS F:20kW:DS Sa-Th:20kW:DS Irr::20kW:DS-RAMADAN
4780.2	VENEZUELA LV DE CARABOBO Valencia	1kW:DS M-Sa:1kW:DS
4780.3	COLOMBIA RADIO SUPER Medellín	Alt 4774.8kHz:2kW:DS-SUPER
4782.8	MALI RTV MALIENNE Bamako	18kW:DS-FRENCH, ETC M-Sa:18kW:DS-FRENCH, ETC
4785	BOLIVIA RADIO BALLIVIAN San Borja	0.5kW:DS
	BRAZIL RADIO BRASIL Campinas	1kW:DS
	RADIO CAIARI Pôrto Velho	1kW:DS Irr::1kW:DS
	RADIO RIBAMAR São Luís	5kW:DS
	CHINA (PR) ZHEJIANG PBS Qu Xian	10kW:DS-1 W-M:10kW:DS-1
(con'd)	COLOMBIA ECOS DEL COMBEIMA Ibagué	5kW:DS-SUPER



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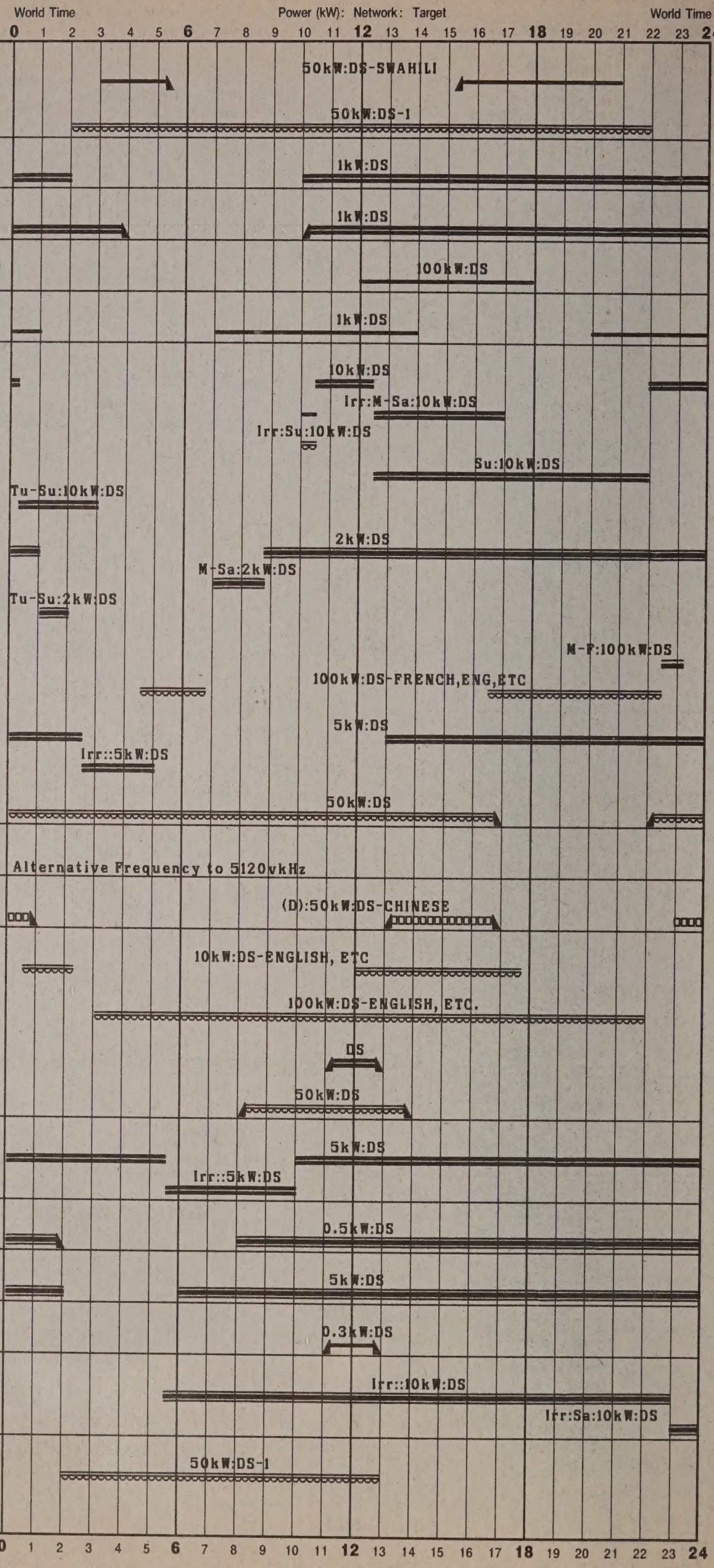

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4785 (con'd)	TANZANIA RADIO TANZANIA Dar es Salaam	50kW:DS-SWAHILI
	USSR AZERBAIJANI RADIO Baku	50kW:DS-1
4785v	PERU RADIO COOPERATIVA Satipo	1kW:DS
4790	PERU RADIO ATLANTIDA Iquitos	1kW:DS
4790v	PAKISTAN (AZAD K) AZAD KASHMIR RADIO Via Islamabad	100kW:DS
4790.2	INDONESIA R REP INDONESIA Fak Fak, Irian Jaya	1kW:DS
4795	BOLIVIA R NUEVA AMERICA La Paz	10kW:DS Irr:M-Sa:10kW:DS Irr:Su:10kW:DS Su:10kW:DS Tu-Su:10kW:DS
	BRAZIL RADIO AQUIDAUANA Aquidauana	2kW:DS M-Sa:2kW:DS Tu-Su:2kW:DS
	CAMEROON RADIO CAMEROON Douala	M-F:100kW:DS 100kW:DS-FRENCH,ENG,ETC
	ECUADOR LV DE LOS CARAS Bahía de Caráquez	5kW:DS Irr::5kW:DS
	USSR BURYAT RADIO Ulan-Ude	50kW:DS
4797v	VIETNAM NGHIA BIN BS Nghia Binh	Alternative Frequency to 5120vkHz
4799.8	CHINA (PR) XINJIANG PBS Urümqi	(D):50kW:DS-CHINESE
4800	INDIA ALL INDIA RADIO Hyderabad	10kW:DS-ENGLISH, ETC
	LESOTHO RADIO LESOTHO Maseru	100kW:DS-ENGLISH, ETC.
	PERU RADIO ONDA AZUL Puno	DS
	USSR YAKUT RADIO Yakutsk	50kW:DS
4800v	ECUADOR RADIO POPULAR Cuenca	5kW:DS Irr::5kW:DS
4805	BRAZIL RADIO ITATIAIA Belo Horizonte	0.5kW:DS
4805v	BRAZIL DIFUSORA AMAZONAS Manaus	5kW:DS
4805.3	INDONESIA R REP INDONESIA Kupang, Timor	0.3kW:DS
4807	SAO TOME E PRINCIPE RADIO NACIONAL São Tomé	Irr::10kW:DS Irr:Sa:10kW:DS
4810 (con'd)	USSR ARMENIAN RADIO Yerevan	50kW:DS-1

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ═

ARABIC / عربي ═ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4810 (con'd)	USSR ARMENIAN RADIO Yerevan	50kW:DS-2
	KIRGHIZ RADIO Frunze, Kirgiziya	50kW:DS-1
4810v	PERU RADIO SAN MARTIN Tarapoto	3kW:DS M-Sa:3kW:DS
4810.4	BOLIVIA RADIO LIBERTAD Dist. Santa Fe	DS M-Sa::DS
	ECUADOR LV DE GALAPAGOS San Cristóbal	5kW:DS
4814.8	BRAZIL R NAC TABATINGA Benjamim Constant	10kW:DS
4815	BRAZIL RADIO DIFUSORA Londrina	0.5kW:DS
	BURKINA FASO RTV BURKINA Ouagadougou	Th/Sa/Su:50kW:DS 50kW:DS-FRENCH, ETC
	CHINA (PR) RADIO BEIJING Togtoh	10kW::EAS/EUSSR
	PAKISTAN PAKISTAN BC CORP Karachi	10kW:DS
4815.4	COLOMBIA RADIO GUATAPURI Valledupar	Irr::1kW:DS
4816.3	BOLIVIA RADIO NACIONAL La Paz	DS-SPANISH, ETC
4819.7	ECUADOR RADIO PAZ Y BIEN Ambato	2kW:DS-SPANISH, ETC Tu-Su:2kW:DS-SPANISH, ETC
4820	BOTSWANA RADIO BOTSWANA Gaborone	50kW:DS-ENGLISH, ETC
	HONDURAS LV EVANGELICA Tegucigalpa	5kW:DS Irr::5kW:DS M:5kW:DS Tu-Su:5kW:DS
	INDIA ALL INDIA RADIO Calcutta	10kW:DS
	USSR KHANTY-MANSIYSK R Khanty-Mansiysk	50kW:DS
4820v	ANGOLA +ER DA HUILA Lubango	Irr::25kW:DS
	VIETNAM HA TUYEN BS Ha Tuyen	DS
4825	BRAZIL RADIO EDUCADORA Bragança	5kW:DS
	GUATEMALA RADIO MAM Cabricán	1kW:DS/SPANISH, ETC
	MAURITANIA ORT DE MAURITANIE Nouakchott	Alternative Frequency to 4845kHz
	PERU LV DE LA SELVA Iquitos	10kW:DS
	USSR RADIO MOSCOW/RP&P Star'obel'sk	(D):100kW::EU
	RADIO MOSCOW/RP&P Vladivostok	(D):100kW::EAS (J):100kW:CHINESE, KOREAN:EAS
(con'd)		

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▬ FRENCH / FRANÇAIS ▬ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
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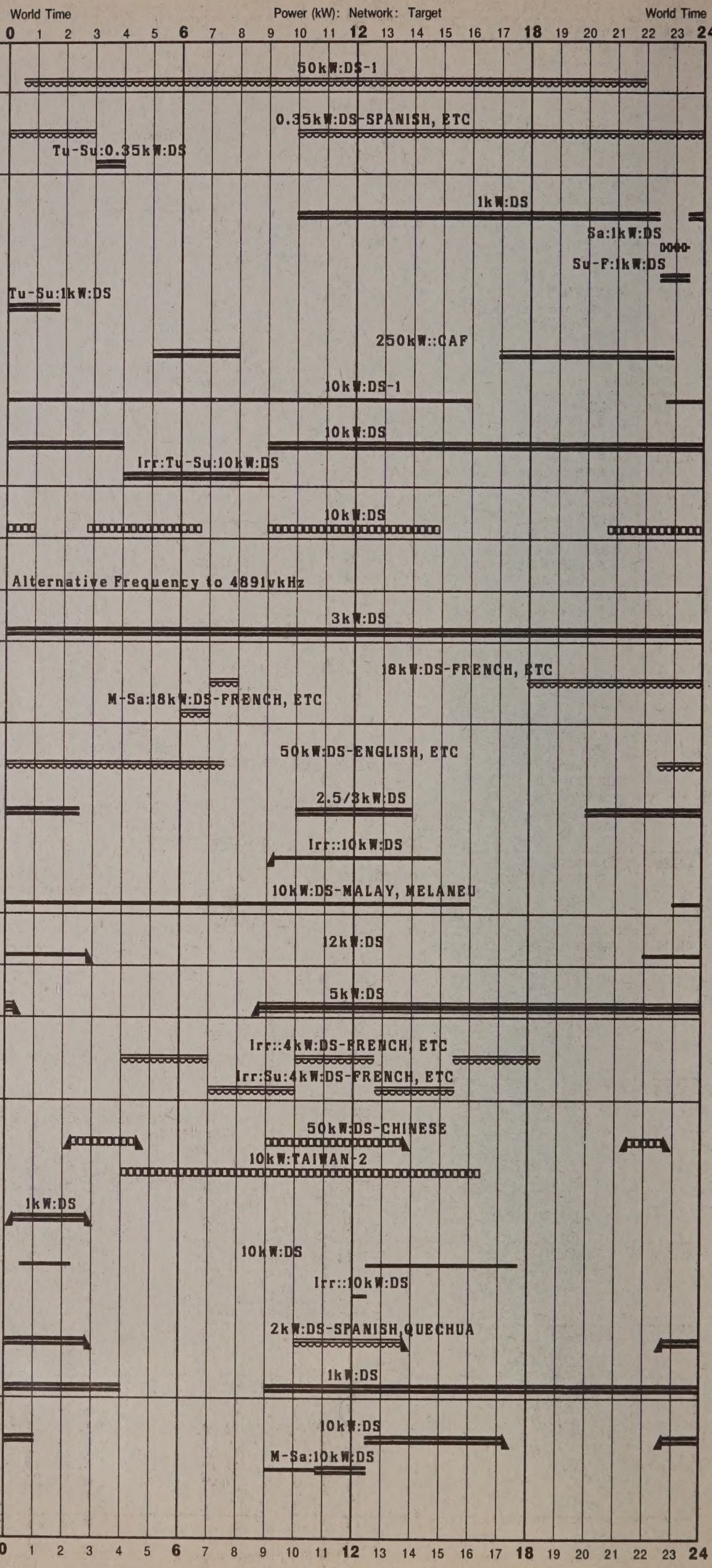

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4825 (con'd)	USSR TURKMEN RADIO Ashkhabad	50kW:DS-1
4826v	PERU RADIO SICUANI Sicuani	0.35kW:DS-SPANISH, ETC Tu-Su:0.35kW:DS
4830	BOLIVIA RADIO GRIGOTA Santa Cruz	1kW:DS Sa:1kW:DS Su-F:1kW:DS Tu-Su:1kW:DS
	GABON AFRIQUE NUMERO UN Moanda-Moyabe	250kW::CAF
	THAILAND RADIO THAILAND Pathum Thani	10kW:DS-1
	VENEZUELA RADIO TACHIRA San Cristóbal	10kW:DS Irr:Tu-Su:10kW:DS
4830v	CHINA (PR) LIAONING PBS Shenyang	10kW:DS
4831	PERU RADIO HUANTA Huanta	Alternative Frequency to 4891vkHz
4832	COSTA RICA RADIO RELOJ San José	3kW:DS
4834.8	MALI RTV MALIENNE Bamako	18kW:DS-FRENCH, ETC M-Sa:18kW:DS-FRENCH, ETC
4835	AUSTRALIA AUSTRALIAN BC CORP Alice Springs	50kW:DS-ENGLISH, ETC
	GUATEMALA RADIO TEZULUTLAN Cobán	2.5/3kW:DS
	INDONESIA R REP INDONESIA Ambon, Maluku	Irr::10kW:DS
	MALAYSIA RTM-SARAWAK Kuching-Stapok	10kW:DS-MALAY, MELANEU
4837v	MONGOLIA RADIO ULAN BATOR Altai	12kW:DS
4837.5	BRAZIL RADIO ATALAIA Corumbá	5kW:DS
4838.5	ZAIRE RADIO BUKAVU Bukavu	Irr::4kW:DS-FRENCH, ETC Irr:Su:4kW:DS-FRENCH, ETC
4840	CHINA (PR) HEILONGJIANG PBS Harbin	50kW:DS-CHINESE
	VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-2
	ECUADOR R INTEROCEANICA Santa Rosa	1kW:DS
	INDIA ALL INDIA RADIO Bombay	10kW:DS Irr::10kW:DS
	PERU RADIO ANDAHUAYLAS Andahuaylas	2kW:DS-SPANISH,QUECHUA
	VENEZUELA RADIO VALERA Valera	1kW:DS
4845 (con'd)	BOLIVIA RADIO FIDES La Paz	10kW:DS M-Sa:10kW:DS

ENGLISH GERMAN / DEUTSCH FRENCH / FRANÇAIS PORTUGUESE / PORTUGUÊS SPANISH / ESPAÑOL
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Frequency (kHz)	Country / Station / Location	World Time — Power (kW): Network: Target
4845 (con'd)	BOLIVIA RADIO FIDES La Paz	Su:10kW:DS Tu-Su:10kW:DS
	BRAZIL RADIO NACIONAL Manaus	250kW:DS Tu-Sa:250kW:DS
	MALAYSIA RADIO MALAYSIA Kajang	50kW:DS-TAMIL Sa/Su:50kW:DS-TAMIL Su:50kW:DS-TAMIL
	MAURITANIA ORT DE MAURITANIE Nouakchott	Alt 4825kHz:100kW:DS-FRENCH,ARAB Alt 4825kHz:F:100kW:DS-FRENCH,ARAB Alt 4825kHz:Sa-Th:100kW:DS-FRENCH,ARAB,ETC
4845v	COLOMBIA RADIO BUCARAMANGA Bucaramanga	Irr::1kW:DS
4850	CAMEROON RADIO CAMEROON Yaoundé	100kW:DS-ENGLISH, FRENCH
	CHINA (PR) CENTRAL PEOPLES BS	TAIWAN-2
	INDIA ALL INDIA RADIO Kohima	2kW:DS
	MONGOLIA RADIO ULAN BATOR Ulan Bator	100kW:DS-1 Tu/F:100kW::EUSSR Sa-M/W/Th:100kW:DS-1
	USSR RADIO MOSCOW/RP&P Via Ulan Bator	100kW::EAS
	UZBEK RADIO Tashkent	50kW:DS-2
	VENEZUELA RADIO CAPITAL Caracas	1kW:DS Su/M:1kW:DS
4851v	ECUADOR RADIO LUZ Y VIDA Loja	5kW:DS Irr::5kW:DS
4852.7	YEMEN (PDR) "VO PALESTINE" Via Radio San'ā	100kW:PLO Irr::100kW:PLO
	RADIO SAN'A San'ā	100kW:DS F:100kW:DS
4855	BRAZIL R POR MUNDO MELHOR Gov Valadares	1kW:DS M-Sa:1kW:DS
	RADIO ARUANA Barra do Garças	1kW:DS
4855v	MAURITIUS MAURITIUS BC CORP Curepipe	10kW:DS-FRENCH,ENG,ETC
4855.7	INDONESIA R REP INDONESIA Palembang,Sumatera	Irr::10kW:DS Irr:Su:10kW:DS
4857v	BOLIVIA RADIO EL CONDOR Uyuni	DS
4860	ANGOLA ER DO LUNDA SUL Saurimo	Irr::5kW:DS
(con'd)	INDIA ALL INDIA RADIO Delhi	10kW::SEA

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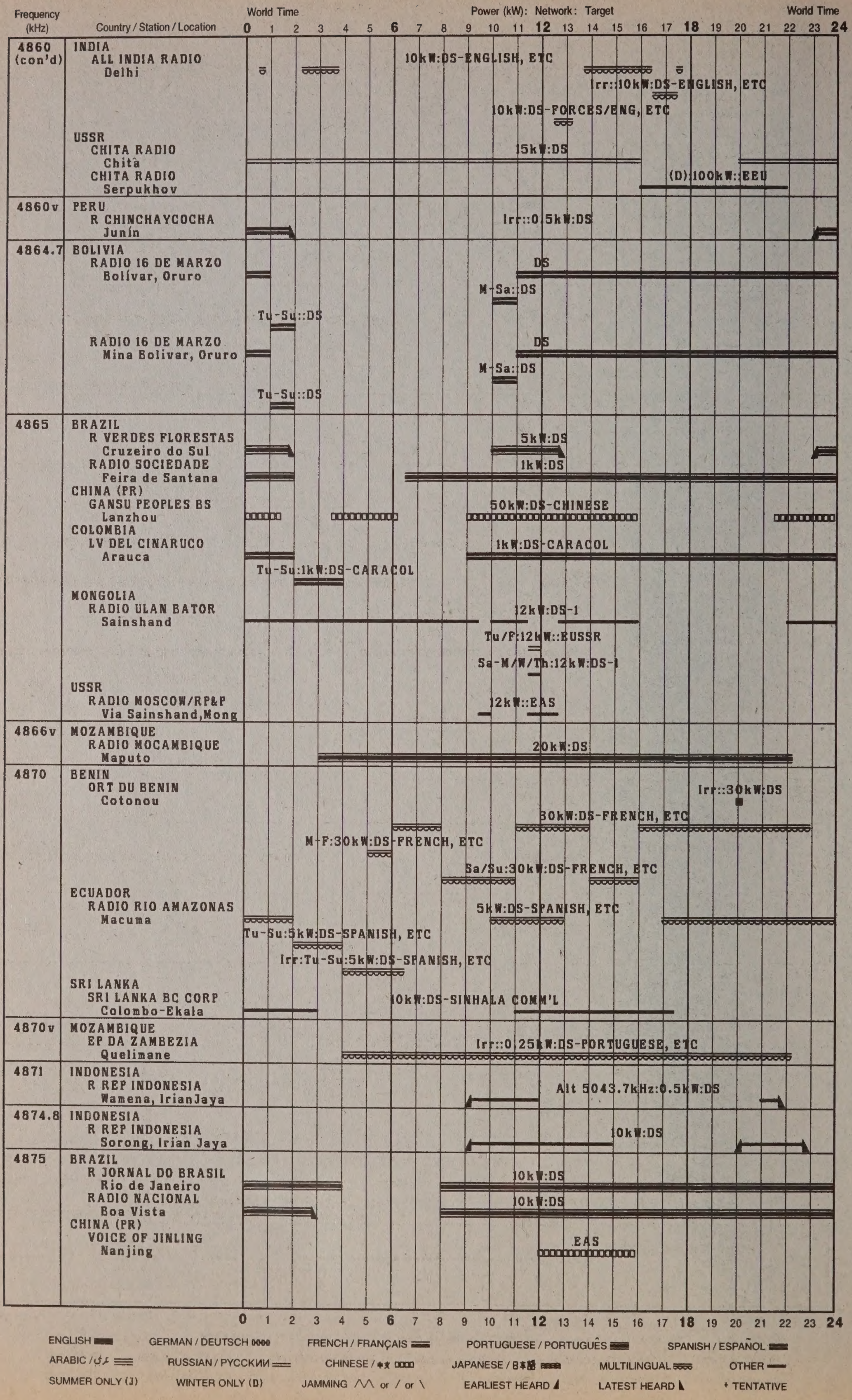

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4860 (con'd)	INDIA ALL INDIA RADIO Delhi	10kW:DS-ENGLISH, ETC Irr::10kW:DS-ENGLISH, ETC 10kW:DS-FORCES/ENG, ETC
	USSR CHITA RADIO Chita	15kW:DS
	CHITA RADIO Serpukhov	(D):100kW::EEU
4860v	PERU R CHINCHAYCOCHA Junín	Irr::0.5kW:DS
4864.7	BOLIVIA RADIO 16 DE MARZO Bolívar, Oruro	DS M-Sa::DS Tu-Su::DS
	RADIO 16 DE MARZO Mina Bolivar, Oruro	DS M-Sa::DS Tu-Su::DS
4865	BRAZIL R VERDES FLORESTAS Cruzeiro do Sul	5kW:DS
	RADIO SOCIEDADE Feira de Santana	1kW:DS
	CHINA (PR) GANSU PEOPLES BS Lanzhou	50kW:DS-CHINESE
	COLOMBIA LV DEL CINARUCO Arauca	1kW:DS-CARACOL Tu-Su:1kW:DS-CARACOL
	MONGOLIA RADIO ULAN BATOR Sainshand	12kW:DS-1 Tu/F:12kW::EUSSR Sa-M/W/Th:12kW:DS-1
	USSR RADIO MOSCOW/RP&P Via Sainshand,Mong	12kW::EAS
4866v	MOZAMBIQUE RADIO MOCAMBIQUE Maputo	20kW:DS
4870	BENIN ORT DU BENIN Cotonou	Irr::30kW:DS 30kW:DS-FRENCH, ETC M-F:30kW:DS-FRENCH, ETC Sa/Su:30kW:DS-FRENCH, ETC
	ECUADOR RADIO RIO AMAZONAS Macuma	5kW:DS-SPANISH, ETC Tu-Su:5kW:DS-SPANISH, ETC Irr:Tu-Su:5kW:DS-SPANISH, ETC
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	10kW:DS-SINHALA COMM'L
4870v	MOZAMBIQUE EP DA ZAMBEZIA Quelimane	Irr::0.25kW:DS-PORTUGUESE, ETC
4871	INDONESIA R REP INDONESIA Wamena, IrianJaya	Alt 5043.7kHz:0.5kW:DS
4874.8	INDONESIA R REP INDONESIA Sorong, Irian Jaya	10kW:DS
4875	BRAZIL R JORNAL DO BRASIL Rio de Janeiro	10kW:DS
	RADIO NACIONAL Boa Vista	10kW:DS
	CHINA (PR) VOICE OF JINLING Nanjing	EAS

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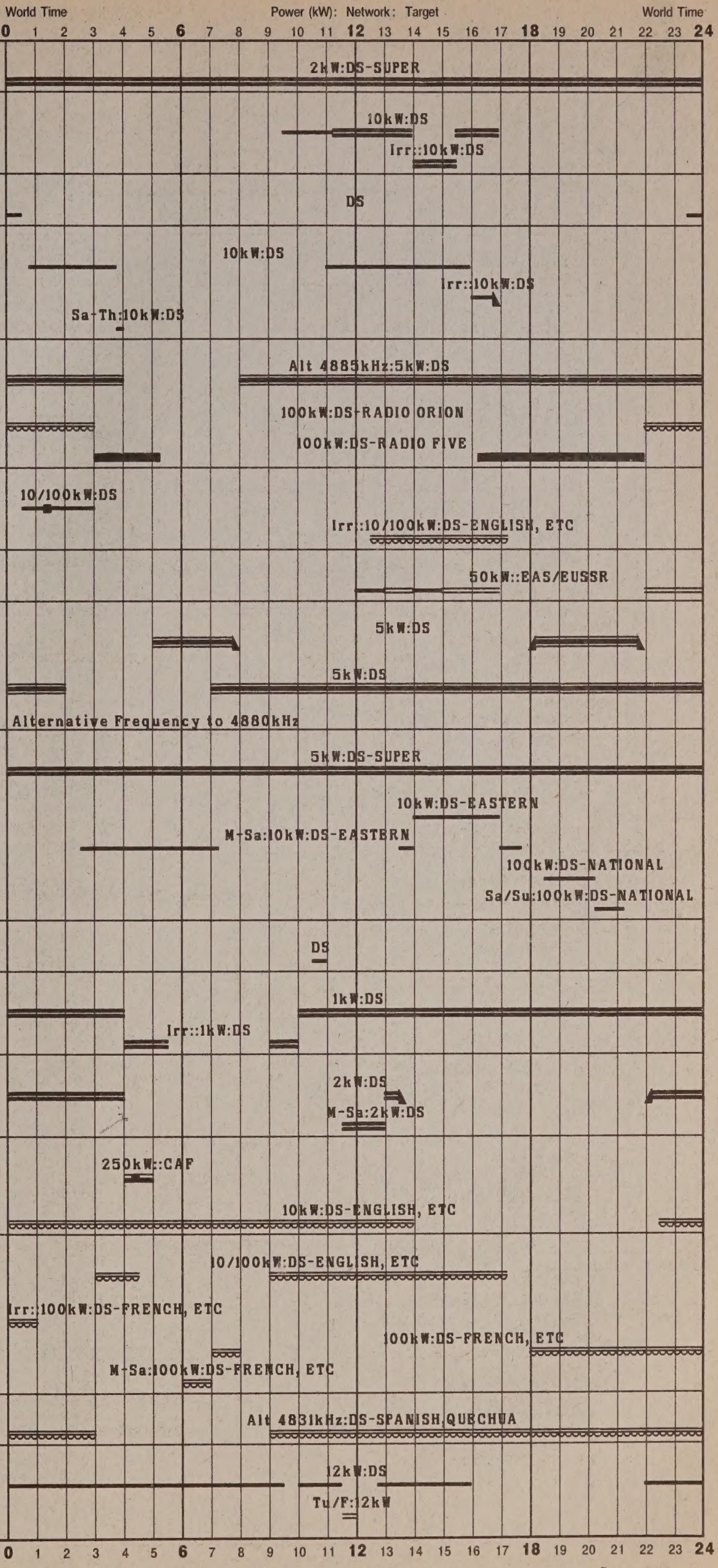
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4875.2	COLOMBIA RADIO SUPER Medellín	2kW:DS-SUPER
4876	BOLIVIA R LA CRUZ DEL SUR La Paz	10kW:DS Irr::10kW:DS
4878	KAMPUCHEA (CAMBODIA) VO THE PEOPLE Phnom Penh	DS
4878.8	PAKISTAN PAKISTAN BC CORP Quetta	10kW:DS Irr::10kW:DS Sa-Th:10kW:DS
4880	BRAZIL R DIFUSORA ACREANA Rio Branco	Alt 4885kHz:5kW:DS
	SOUTH AFRICA SOUTH AFRICAN BC Meyerton	100kW:DS-RADIO ORION 100kW:DS-RADIO FIVE
4880v	BANGLADESH RADIO BANGLADESH Dhaka	10/100kW:DS Irr::10/100kW:DS-ENGLISH, ETC
4883	CHINA (PR) RADIO BEIJING Hohhot	50kW::EAS/EUSSR
4885	ANGOLA ER DO ZAIRE M'banza Congo	5kW:DS
	BRAZIL R CLUBE DO PARA Belém	5kW:DS
	R DIFUSORA ACREANA Rio Branco	Alternative Frequency to 4880kHz
	COLOMBIA ONDAS DEL META Villavicencio	5kW:DS-SUPER
	KENYA VOICE OF KENYA Nairobi	10kW:DS-EASTERN M-Sa:10kW:DS-EASTERN 100kW:DS-NATIONAL Sa/Su:100kW:DS-NATIONAL
4885v	VIETNAM THAN HOA BS Thanh Hoa	DS
4885.3	PERU RADIO HUANCAVELICA Huancavelica	1kW:DS Irr::1kW:DS
4889.6	ECUADOR CENTINELA DEL SUR Loja	2kW:DS M-Sa:2kW:DS
4890	FRANCE RADIO FRANCE INTL Via G	250kW::CAF
	PAPUA NEW GUINEA NATIONAL BC OF PNG Port Moresby	10kW:DS-ENGLISH, ETC
4890v	BANGLADESH RADIO BANGLADESH Dhaka	10/100kW:DS-ENGLISH, ETC
	SENEGAL ORT DU SENEGAL Dakar	Irr::100kW:DS-FRENCH, ETC 100kW:DS-FRENCH, ETC M-Sa:100kW:DS-FRENCH, ETC
4891v	PERU RADIO HUANTA Huanta	Alt 4831kHz:DS-SPANISH,QUECHUA
4893v	MONGOLIA RADIO ULAN BATOR Murun	12kW:DS Tu/F:12kW
(con'd)		



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Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
4893v (con'd)	**MONGOLIA** RADIO ULAN BATOR Murun	Sa-M/W/Th:12kW:DS
	USSR RADIO MOSCOW/RP&P Via Murun, Mongolia	12kW
4894	**VIETNAM** VOICE OF VIETNAM Hanoi	DS Su::DS
4895	**BRAZIL** RADIO BARE Manaus	1kW:DS Irr::1kW:DS
	INDIA ALL INDIA RADIO Kurseong	20kW:DS
	MALAYSIA RTM-SARAWAK Kuching-Stapok	10kW:DS-VERNACULAR
	PERU RADIO CHANCHAMAYO La Merced	0.4kW:DS Tu-Su:0.4kW:DS Irr:Tu-Su:0.4kW:DS
	USSR RADIO MOSCOW/RP&P	(D)::N AMERICAN
	TURKMEN RADIO Ashkhabad	50kW:DS-2
	TYUMEN RADIO Tyumen	15kW:DS
4900	**GUINEA** RTV GUINEENNE Conakry	18kW:DS-ENGLISH, FRENCH 18kW:DS-FRENCH, ETC M-Sa:18kW:DS-FRENCH, ETC Su:18kW:DS-FRENCH, ETC
	VENEZUELA RADIO JUVENTUD Barquisimeto	Irr::10kW:DS-VERY IRREGULAR
4900.6	**ECUADOR** RADIO LIBERTADOR Saquisilí	Irr::1kW:DS
4902	**SRI LANKA** SRI LANKA BC CORP Colombo-Ekala	10kW:DS-SINHALA
4904v	**CHAD** RADIODIF NATIONALE N'djaména	Alt 4920vkHz:100kW:DS-FRENCH, ETC Alt 4920vkHz:M-Sa:100kW:DS-FRENCH, ETC Alt 4920vkHz:Sa:100kW:DS-FRENCH
4905	**BRAZIL** R RELOGIO FEDERAL Rio de Janeiro	5kW:DS Irr::5kW:DS
	RADIO ARAGUAIA Araguaína	1kW:DS
	CHINA (PR) CENTRAL PEOPLES BS Beijing	10kW:DS-1
	UNITED ARAB EMIRATES VOICE OF THE UAE Abu Dhabi	Irr
4908v	**PERU** RADIO COBRIZA 2000 Pacaycasa	Alternative Frequency to 4927vkHz
4909.4	**PERU** RADIO TAWANTINSUYO Cuzco	5kW:DS-SPANISH, ETC
4910	**AUSTRALIA** AUSTRALIAN BC CORP Tennant Creek	50kW:DS-ENGLISH, ETC
	INDONESIA R REP INDONESIA Bukittinggi, Sumat'a	Irr::1kW:DS
4910v	**ZAMBIA** RADIO ZAMBIA Lusaka	50kW:DS-ENGLISH, ETC F/Sa:50kW:DS-ENGLISH, ETC

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4910.4	HONDURAS LV DE LA MOSQUITIA Puerto Lempira	0.5kW:DS-SPANISH,MISKITO
4911v	ECUADOR EM GRAN COLOMBIA Quito	Irr::10kW:DS
4915	BRAZIL RADIO ANHANGUERA Goiânia	10kW:DS
	RADIO MARIMOTO Ji-Paraná	Alt 5015kHz:Irr::5kW:DS
	RADIO NACIONAL Macapá	10kW:DS
	CHINA (PR) GUANGXI PEOPLES BS Nanning	10kW:DS-1
	CLANDESTINE (M EAST) "VO IRANIAN KURDS"	BLACK CLANDESTINE?:ME
	GHANA GHANA BC CORP Accra	Alt 3240kHz:50kW:DS-1/ENGLISH, ETC Alt 3240kHz:Sa/Su:50kW:DS-1/ENGLISH, ETC
	KENYA VOICE OF KENYA Nairobi	100kW:DS-CENTRAL M-Sa:100kW:DS-CENTRAL
4915v	COLOMBIA ARMONIAS CAQUETA Florencia	3kW:DS M-Sa:3kW:DS Tu-Su:3kW:DS
4919.5	PERU RADIO CENTRAL Bella Vista	1kW:DS
4920	AFGHANISTAN RADIO AFGHANISTAN Via USSR	(D):::EU
	AUSTRALIA AUSTRALIAN BC CORP Brisbane	10kW:DS
	INDIA ALL INDIA RADIO Madras	10kW:DS-A/ENGLISH, ETC Irr::10kW:DS-A/ENGLISH, ETC
	USSR YAKUT RADIO Yakutsk	50kW:DS
4920v	CHAD RADIODIF NATIONALE N'djaména	Alternative Frequency to 4904vkHz
4920.4	ECUADOR RADIO QUITO Quito	5kW:DS M-Sa:5kW:DS Tu-Su:5kW:DS
4922v	PERU ONDAS DEL TITICACA Puno	1kW:DS-SPANISH, ETC Tu-Su:1kW:DS
4924.2	BOLIVIA RADIO COSMOS Cochabamba	Irr::1kW:DS Irr:M-Sa:1kW:DS
4925	BRAZIL RADIO DIFUSORA Taubaté	1kW:DS Irr::1kW:DS
	CHINA (PR) HEILONGJIANG PBS Harbin	50kW:DS-2
4925v	MOZAMBIQUE RADIO MOCAMBIQUE Maputo	7.5kW:DS
4925.6	EQUATORIAL GUINEA RADIO NACIONAL Batá	Alt 5004vkHz:100kW:DS-SPANISH, ETC
4927 (con'd)	INDONESIA R REP INDONESIA Jambi, Sumatera	7.5kW:DS

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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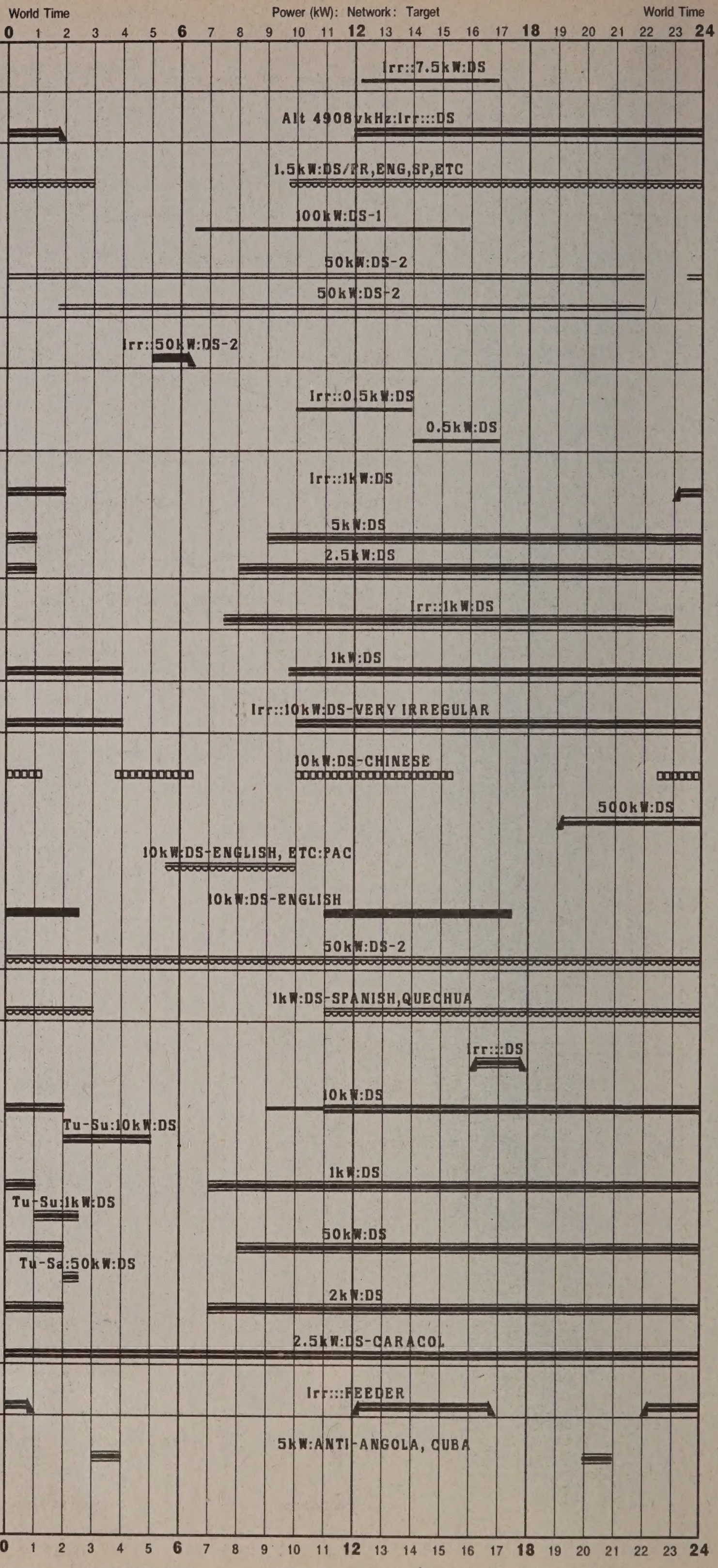

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4927 (con'd)	**INDONESIA** R REP INDONESIA Jambi, Sumatera	Irr::7.5kW:DS
4927v	**PERU** RADIO COBRIZA 2000 Pacaycasa	Alt 4908vkHz:Irr:::DS
4930	**HAITI** RADIO STATION 4VEH Cap Haïtien	1.5kW:DS/FR,ENG,SP,ETC
	NAMIBIA R SOUTHWEST AFRICA Windhoek	100kW:DS-1
	USSR RADIO MOSCOW Ashkabad	50kW:DS-2
	RADIO MOSCOW Tbilisi	50kW:DS-2
4931.8	**NIGERIA** RADIO NIGERIA Lagos	Irr::50kW:DS-2
4932v	**INDONESIA** R REP INDONESIA Surakarta, Jawa	Irr::0.5kW:DS 0.5kW:DS
4935	**BOLIVIA** RADIO MONTEAGUDO Monteagudo	Irr::1kW:DS
	BRAZIL R JORNAL A CRITICA Manaus	5kW:DS
	RADIO DIFUSORA Jataí	2.5kW:DS
4935v	**BRAZIL** RADIO CAPIXABA Vitória	Irr::1kW:DS
4936	**PERU** RADIO TROPICAL Tarapoto	1kW:DS
4939.8	**VENEZUELA** RADIO YARACUY San Felipe	Irr::10kW:DS-VERY IRREGULAR
4940	**CHINA (PR)** QINGHAI PEOPLES BS Xining	10kW:DS-CHINESE
	IVORY COAST RTV IVOIRIENNE Abidjan	500kW:DS
	MARSHALL ISLANDS WSZO-R MARSHALLS Majuro	10kW:DS-ENGLISH, ETC:PAC
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	10kW:DS-ENGLISH
	USSR UKRAINIAN RADIO Kiev	50kW:DS-2
4942v	**PERU** RADIO ABANCAY Abancay	1kW:DS-SPANISH,QUECHUA
4945	**ANGOLA** RADIO NACIONAL	Irr:::DS
	BOLIVIA RADIO ILLIMANI La Paz	10kW:DS Tu-Su:10kW:DS
	BRAZIL RADIO DIFUSORA Poços de Caldas	1kW:DS Tu-Su:1kW:DS
	RADIO NACIONAL Pôrto Velho	50kW:DS Tu-Sa:50kW:DS
	VOZ SAO FRANCISCO Petrolina	2kW:DS
	COLOMBIA CARACOL NEIVA Neiva	2.5kW:DS-CARACOL
4945v	**URUGUAY** LA VOZ DE ARTIGAS Artigas	Irr:::FEEDER
4950 (con'd)	**CLANDESTINE (AFRICA)** "A VOZ DA VERDADE" Pietersburg, S Af	5kW:ANTI-ANGOLA, CUBA

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ═ SPANISH / ESPAÑOL ═
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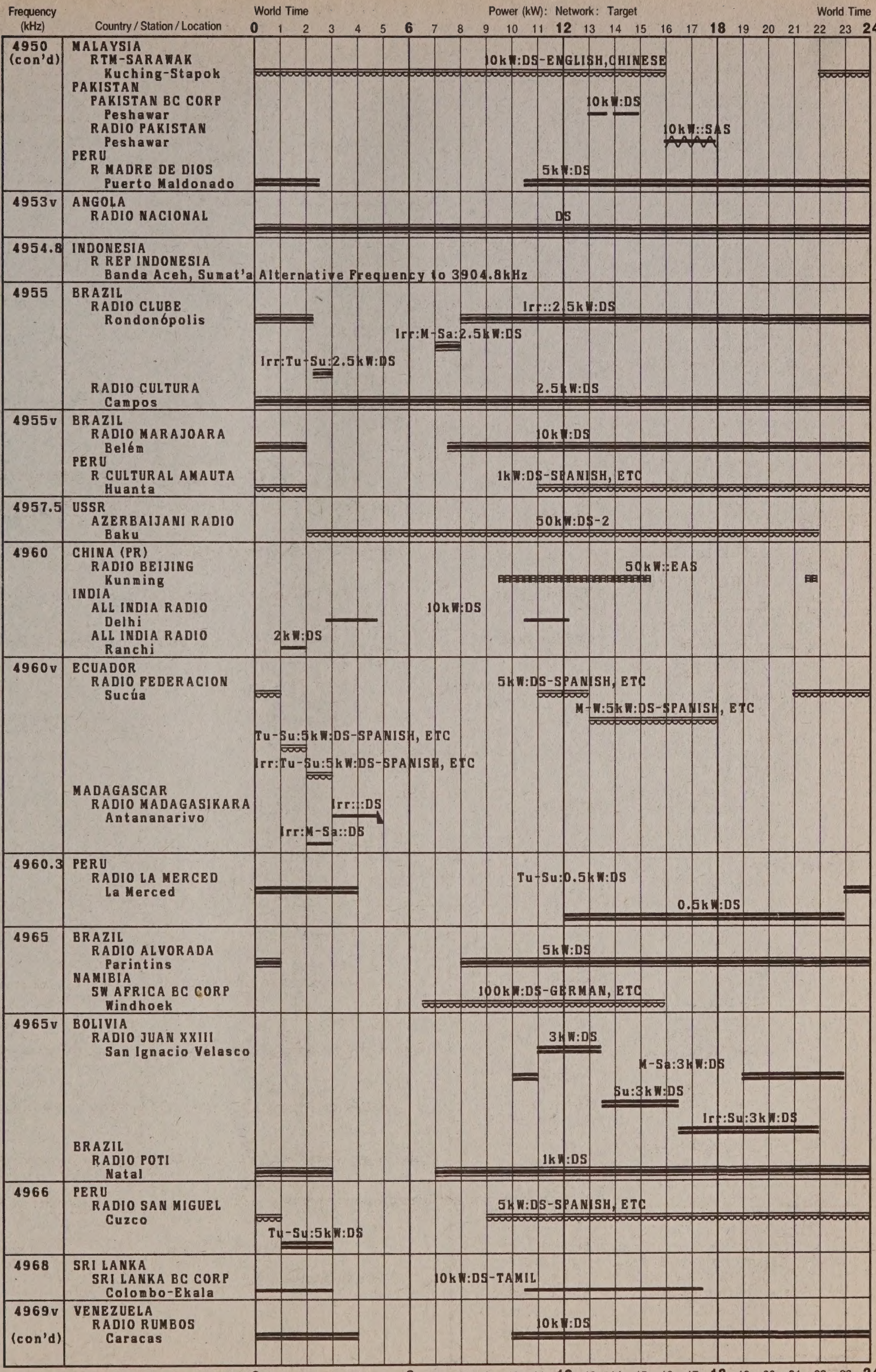

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4950 (con'd)	MALAYSIA RTM-SARAWAK Kuching-Stapok	10kW:DS-ENGLISH,CHINESE
	PAKISTAN PAKISTAN BC CORP Peshawar	10kW:DS
	RADIO PAKISTAN Peshawar	10kW::SAS
	PERU R MADRE DE DIOS Puerto Maldonado	5kW:DS
4953v	ANGOLA RADIO NACIONAL	DS
4954.8	INDONESIA R REP INDONESIA Banda Aceh, Sumat'a	Alternative Frequency to 3904.8kHz
4955	BRAZIL RADIO CLUBE Rondonópolis	Irr::2.5kW:DS Irr:M-Sa:2.5kW:DS Irr:Tu-Su:2.5kW:DS
	RADIO CULTURA Campos	2.5kW:DS
4955v	BRAZIL RADIO MARAJOARA Belém	10kW:DS
	PERU R CULTURAL AMAUTA Huanta	1kW:DS-SPANISH, ETC
4957.5	USSR AZERBAIJANI RADIO Baku	50kW:DS-2
4960	CHINA (PR) RADIO BEIJING Kunming	50kW::EAS
	INDIA ALL INDIA RADIO Delhi	10kW:DS
	ALL INDIA RADIO Ranchi	2kW:DS
4960v	ECUADOR RADIO FEDERACION Sucúa	5kW:DS-SPANISH, ETC M-W:5kW:DS-SPANISH, ETC Tu-Su:5kW:DS-SPANISH, ETC Irr:Tu-Su:5kW:DS-SPANISH, ETC
	MADAGASCAR RADIO MADAGASIKARA Antananarivo	Irr::DS Irr:M-Sa::DS
4960.3	PERU RADIO LA MERCED La Merced	Tu-Su:0.5kW:DS 0.5kW:DS
4965	BRAZIL RADIO ALVORADA Parintins	5kW:DS
	NAMIBIA SW AFRICA BC CORP Windhoek	100kW:DS-GERMAN, ETC
4965v	BOLIVIA RADIO JUAN XXIII San Ignacio Velasco	3kW:DS M-Sa:3kW:DS Su:3kW:DS Irr:Su:3kW:DS
	BRAZIL RADIO POTI Natal	1kW:DS
4966	PERU RADIO SAN MIGUEL Cuzco	5kW:DS-SPANISH, ETC Tu-Su:5kW:DS
4968	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	10kW:DS-TAMIL
4969v (con'd)	VENEZUELA RADIO RUMBOS Caracas	10kW:DS

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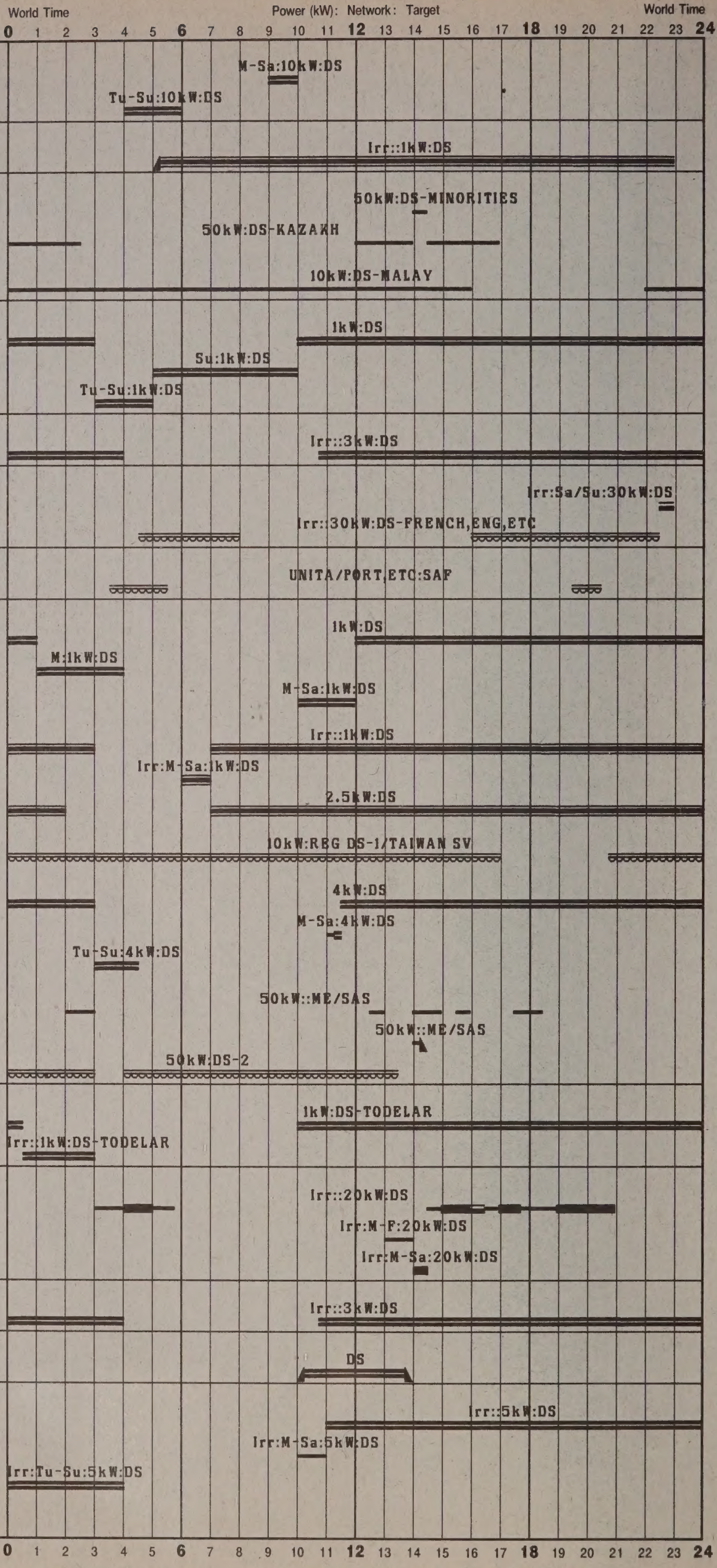

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4969v (con'd)	VENEZUELA RADIO RUMBOS Caracas	M-Sa:10kW:DS Tu-Su:10kW:DS
4969.8	ANGOLA ER DA CABINDA Cabinda	Irr::1kW:DS
4970	CHINA (PR) CENTRAL PEOPLES BS Urümqi XINJIANG PBS Urümqi	50kW:DS-MINORITIES 50kW:DS-KAZAKH
	MALAYSIA RTM-KOTA KINABALU Kota Kinabalu	10kW:DS-MALAY
4970.4	PERU RADIO IMAGEN Tarapoto	1kW:DS Su:1kW:DS Tu-Su:1kW:DS
4971	ECUADOR RADIO TARQUI Quito	Irr::3kW:DS
4971v	CAMEROON RADIO CAMEROON Yaoundé	Irr:Sa/Su:30kW:DS Irr::30kW:DS-FRENCH,ENG,ETC
4973	CLANDESTINE (AFRICA) "AV DO GALO NEGRO"	UNITA/PORT,ETC:SAF
4975	BOLIVIA MARIA AUXILIADORA Montero	1kW:DS M:1kW:DS M-Sa:1kW:DS
	BRAZIL RADIO IGUATEMI Osasco	Irr::1kW:DS Irr:M-Sa:1kW:DS
	RADIO TIMBIRA São Luís	2.5kW:DS
	CHINA (PR) FUJIAN PEOPLES BS Jianyang	10kW:RBG DS-1/TAIWAN SV
	PERU RADIO DEL PACIFICO Lima	4kW:DS M-Sa:4kW:DS Tu-Su:4kW:DS
	USSR RADIO DUSHANBE Dushanbé	50kW::ME/SAS
	RADIO MOSCOW/RP&P Dushanbé	50kW::ME/SAS
	TADZHIK RADIO Dushanbé	50kW:DS-2
4975v	COLOMBIA ONDAS ORTEGUAZA Florencia	1kW:DS-TODELAR Irr::1kW:DS-TODELAR
4976v	UGANDA RADIO UGANDA Kampala	Irr::20kW:DS Irr:M-F:20kW:DS Irr:M-Sa:20kW:DS
4977v	ECUADOR RADIO TARQUI Quito	Irr::3kW:DS
4977.2	PERU RADIO LA HORA Cuzco	DS
4980 (con'd)	BOLIVIA R BATALLON TOPATER Oruro	Irr::5kW:DS Irr:M-Sa:5kW:DS Irr:Tu-Su:5kW:DS

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Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
4980 (con'd)	CHINA (PR) CENTRAL PEOPLES BS Urümqi	DS-MINORITIES
	XINJIANG PBS Urümqi	DS-MONGOLIAN
	SWAZILAND SWAZI COMMERCIAL R Sandlane	100kW::SAF M-F:100kW::SAF M-F:100kW:PARALELO 27:SAF Sa/Su:100kW:PARALELO 27:SAF
	VENEZUELA ECOS DEL TORBES San Cristóbal	10kW:DS Su:10kW:DS
4980v	PAKISTAN (AZAD K) AZAD KASHMIR RADIO Via Islamabad	10kW:DS
4980.6	ECUADOR ONDAS AZUAYAS Cuenca	Irr::10kW:DS
4985	BRAZIL R BRASIL CENTRAL Goiânia	10kW:DS
4990	BOLIVIA RADIO BENI Magdalena	Irr::0.5kW:DS 0.5kW:DS
	CHINA (PR) HUNAN PEOPLES BS Changsha	10kW:DS
	ECUADOR RADIO BAHA'I Otavalo	1kW:DS
	INDIA ALL INDIA RADIO Delhi	SAS
	NIGERIA RADIO NIGERIA Lagos	50kW:DS-1/ENGLISH, ETC
	SOUTH AFRICA RADIO RSA Meyerton	250kW::SAF (D):250kW::SAF (J):250kW::SAF
	URUGUAY RADIO PAYSANDU Paysandú	Irr::DS (FEEDER)
	USSR ARMENIAN RADIO Yerevan	50kW:DS-1
	RADIO YEREVAN Yerevan	50kW::ME
4990v	IRAN VO THE ISLAMIC REP Tehrān	Irr:::DS:ME
4990.7	PERU RADIO ANCASH Huáraz	3/10kW:DS
4991	BOLIVIA RADIO ANIMAS Chocaya	1kW:DS M-Sa:1kW:DS Irr:Su:1kW:DS Tu-Su:1kW:DS
4995v	MONGOLIA RADIO ULAN BATOR	12kW:DS-1 Tu/F:12kW::EUSSR Sa-M/W/Th:12kW:DS-1
	USSR RADIO MOSCOW/RP&P Via Mongolia	12kW::EAS
4995.8 (con'd)	PERU RADIO ANDINA Huancayo	1kW:DS Irr::1kW:DS

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World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
4995.8 (con'd)	PERU RADIO ANDINA Huancayo	Tu-Su:1kW:DS
5000	USA WWV Fort Collins, Colo	10kW:WEATHER/WORLD TIME
	WWVH Kekaha, Hawaii	5kW:WEATHER/WORLD TIME
5004v	EQUATORIAL GUINEA RADIO NACIONAL Batá	Alternative Frequency to 4925.6kHz
	MOZAMBIQUE EP DE CABO DELGADO Pemba	Irr:::DS
5005	NEPAL RADIO NEPAL Harriharpur	Irr::100kW::SAS 100kW:DS
5005.5	BOLIVIA RADIO CRISTAL La Paz	1kW:DS Irr::1kW:DS
5005.7	SURINAME STICHTING R OMROEP Paramaribo	0.35kW:DS Tu-Su:0.35kW:DS
5007v	PAKISTAN PAKISTAN BC CORP Rawalpindi	Irr::10kW:DS Irr:F:10kW:DS
5010	CAMEROON RADIO CAMEROON Garoua	100kW:DS-FRENCH,ENG,ETC
	CHINA (PR) GUANGXI PEOPLES BS Nanning	10kW:DS-2
	COLOMBIA CULT SURCOLOMBIANA Neiva	Irr::2.5kW:DS-VERY IRR
	PERU RADIO ECO Iquitos	1kW:DS M-Sa:1kW:DS
	SINGAPORE SINGAPORE BC CORP Jurong	50kW:DS-1
5010v	MADAGASCAR RADIO MADAGASIKARA Antananarivo	Alt 2495vkHz:Irr:M-Sa:100kW:DS Alt 2495vkHz:Irr::100kW:DS-FRENCH, ETC
	PAKISTAN PAKISTAN BC CORP Rawalpindi	Irr::10kW:DS
5015	BRAZIL RADIO COPACABANA São Gonçalo	1kW:DS Irr::1kW:DS
	RADIO CULTURA Cuiabá	5kW:DS
	RADIO MARIMOTO Ji-Paraná	Alternative Frequency to 4915kHz
	RADIO PIONEIRA Teresina	1kW:DS
	USSR ARKHANGELSK RADIO Arkhangelsk	50kW:DS
	PRIMORSK RADIO Vladivostok	50kW:DS Irr::50kW:DS
	RADIO TIKHIY OKEAN Vladivostok	50kW:MARINERS:PAC
5015v	CLANDESTINE (AFRICA) "RADIO TRUTH" Pietersburg, S Af	5kW:ANTI-ZIMBABWE
	ECUADOR ESCUELAS R'FONICAS Riobamba	10kW:DS Irr::10kW:DS
5015.4	PERU RADIO MOYOBAMBA Moyobamba	1kW:DS

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH GERMAN / DEUTSCH FRENCH / FRANÇAIS PORTUGUESE / PORTUGUÊS SPANISH / ESPAÑOL
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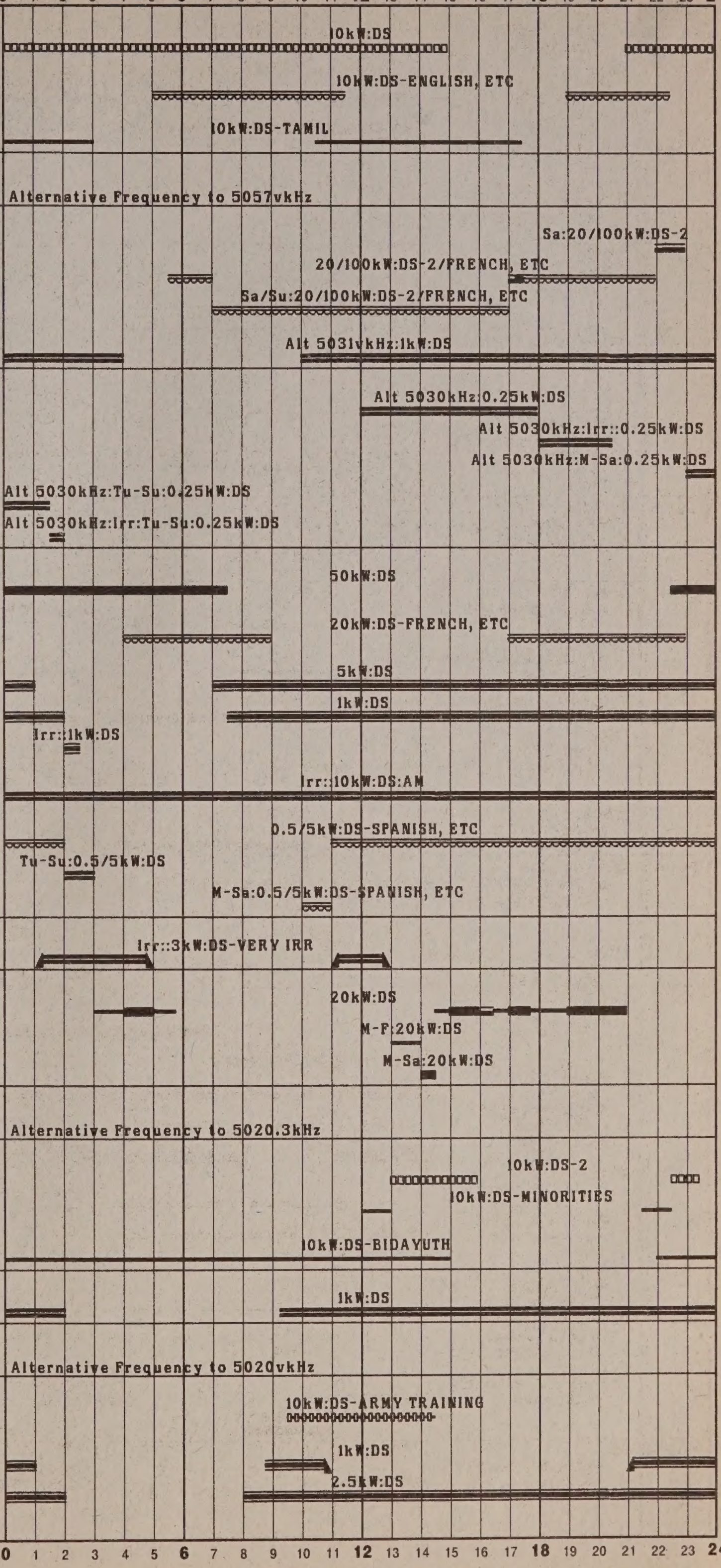

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5020	CHINA (PR) JIANGXI PEOPLES BS Nanchang	10kW:DS
	SOLOMON IS SOLOMON ISLANDS BC Honiara	10kW:DS-ENGLISH, ETC
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	10kW:DS-TAMIL
5020v	ALBANIA SHQIPTAR RTV Gjirokastër	Alternative Frequency to 5057vkHz
	NIGER LA VOIX DU SAHEL Niamey	Sa:20/100kW:DS-2 20/100kW:DS-2/FRENCH, ETC Sa/Su:20/100kW:DS-2/FRENCH, ETC
	VENEZUELA RADIO NACIONAL Caracas	Alt 5031vkHz:1kW:DS
5020.3	BOLIVIA CUARTO CENTENARIO Tupiza	Alt 5030kHz:0.25kW:DS Alt 5030kHz:Irr::0.25kW:DS Alt 5030kHz:M-Sa:0.25kW:DS Alt 5030kHz:Tu-Su:0.25kW:DS Alt 5030kHz:Irr:Tu-Su:0.25kW:DS
5025	AUSTRALIA AUSTRALIAN BC CORP Katherine	50kW:DS
	BENIN ORT DU BENIN Parakou	20kW:DS-FRENCH, ETC
	BRAZIL R TRANSAMAZONICA Altamira	5kW:DS
	RADIO BORBOREMA Campina Grande	1kW:DS Irr::1kW:DS
	CUBA RADIO REBELDE Havana	Irr::10kW:DS:AM
	PERU RADIO QUILLABAMBA Quillabamba	0.5/5kW:DS-SPANISH, ETC Tu-Su:0.5/5kW:DS M-Sa:0.5/5kW:DS-SPANISH, ETC
5025.6	ECUADOR RADIO SPLENDIT Cuenca	Irr::3kW:DS-VERY IRR
5026v	UGANDA RADIO UGANDA Kampala	20kW:DS M-F:20kW:DS M-Sa:20kW:DS
5030	BOLIVIA CUARTO CENTENARIO Tupiza	Alternative Frequency to 5020.3kHz
	CHINA (PR) CENTRAL PEOPLES BS Xi'an	10kW:DS-2 10kW:DS-MINORITIES
	MALAYSIA RTM-SARAWAK Kuching-Stapok	10kW:DS-BIDAYUTH
5030v	PERU RADIO LOS ANDES Huamachuco	1kW:DS
5031v	VENEZUELA RADIO NACIONAL Caracas	Alternative Frequency to 5020vkHz
5035	AUSTRIA SCHULUNGSSENDER Vienna	10kW:DS-ARMY TRAINING
	BRAZIL R EDUCACAO RURAL Coarí	1kW:DS
(con'd)	RADIO APARECIDA Aparecida	2.5kW:DS

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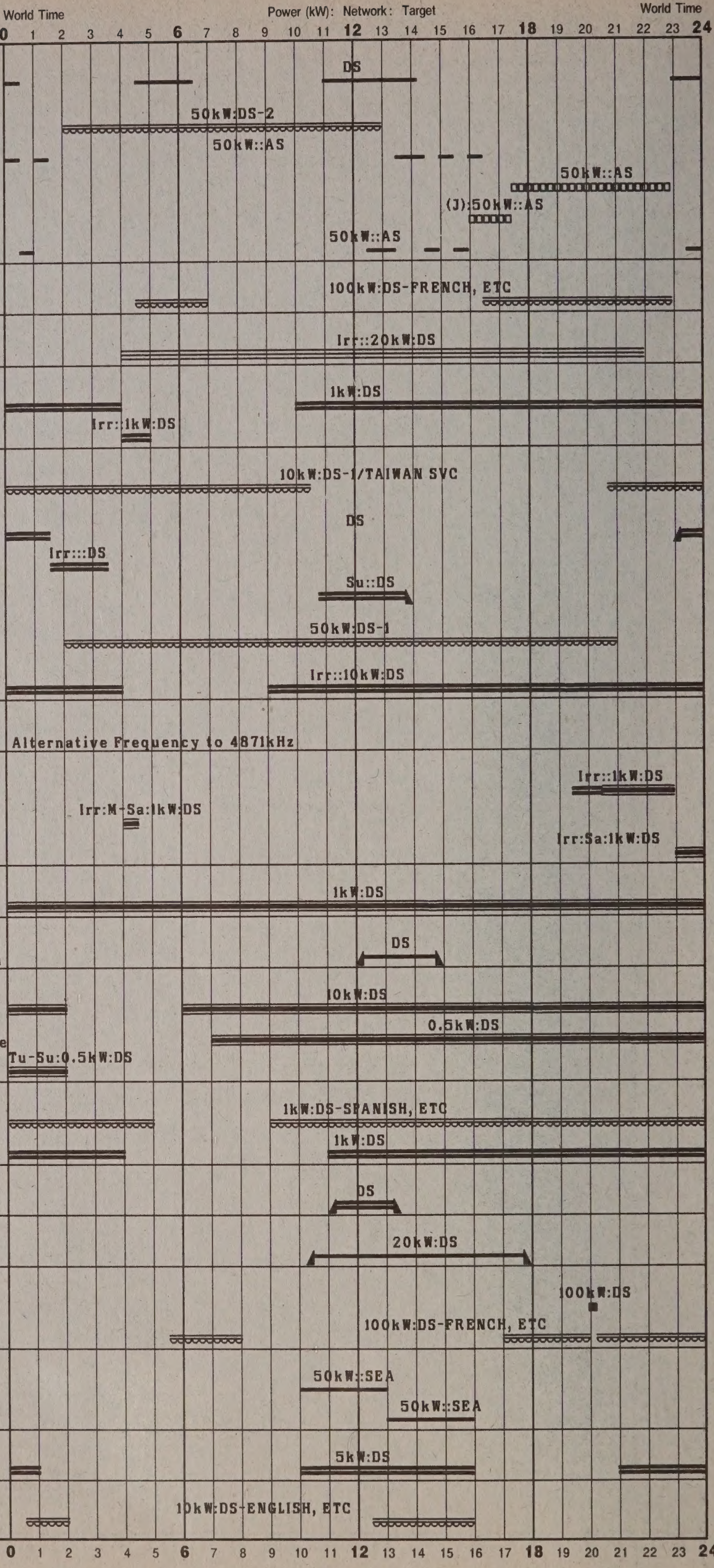

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5035 (con'd)	**KAMPUCHEA (CAMBODIA)** VO THE PEOPLE Phnom Penh	DS
	USSR KAZAKH RADIO Alma-Ata	50kW:DS-2
	RADIO ALMA-ATA Alma-Ata	50kW::AS
	RADIO MOSCOW/RP&P Alma-Ata	50kW::AS (J):50kW::AS
	RADIO TASHKENT Alma-Ata	50kW::AS
5035v	**CENTRAL AFRICAN REP** RTV CENTRAFRICAINE Bangui	100kW:DS-FRENCH, ETC
5038.8	**SUDAN** RADIO OF THE SUDAN Omdurman	Irr::20kW:DS
5039.8	**PERU** RADIO LIBERTAD Junín	1kW:DS Irr::1kW:DS
5040	**CHINA (PR)** FUJIAN PEOPLES BS Fuzhou	10kW:DS-1/TAIWAN SVC
	ECUADOR LA VOZ DEL UPANO Macas	DS Irr:::DS Su::DS
	USSR GEORGIAN RADIO Tbilisi	50kW:DS-1
	VENEZUELA RADIO MATURIN Maturín	Irr::10kW:DS
5043.7	**INDONESIA** R REP INDONESIA Wamena, IrianJaya	Alternative Frequency to 4871kHz
5043.8	**ANGOLA** ER DE BENGUELA Benguela	Irr::1kW:DS Irr:M-Sa:1kW:DS Irr:Sa:1kW:DS
5044	**ANGOLA** ER DE BENGUELA Benguela	1kW:DS
5044.8	**INDONESIA** R REP INDONESIA Jayapura,Irian Jaya	DS
5045	**BRAZIL** R CULTURA DO PARA Belém	10kW:DS
	RADIO DIFUSORA Presidente Prudente	0.5kW:DS Tu-Su:0.5kW:DS
5045v	**PERU** RADIO MUNDO Cuzco	1kW:DS-SPANISH, ETC
	RADIO RIOJA Rioja	1kW:DS
5045.5	**ECUADOR** UNIDENTIFIED	DS
5046v	**INDONESIA** R REP INDONESIA Yogyakarta, Jawa	20kW:DS
5047	**TOGO** RADIO LOME Lomé-Togblekope	100kW:DS 100kW:DS-FRENCH, ETC
5049.7	**CHINA (PR)** GUANGXI RADIO Guangzhou	50kW::SEA
	RADIO BEIJING Guangzhou	50kW::SEA
5049.8	**ECUADOR** R JESUS GRAN PODER Quito	5kW:DS
5050 (con'd)	**INDIA** ALL INDIA RADIO Aizawl	10kW:DS-ENGLISH, ETC

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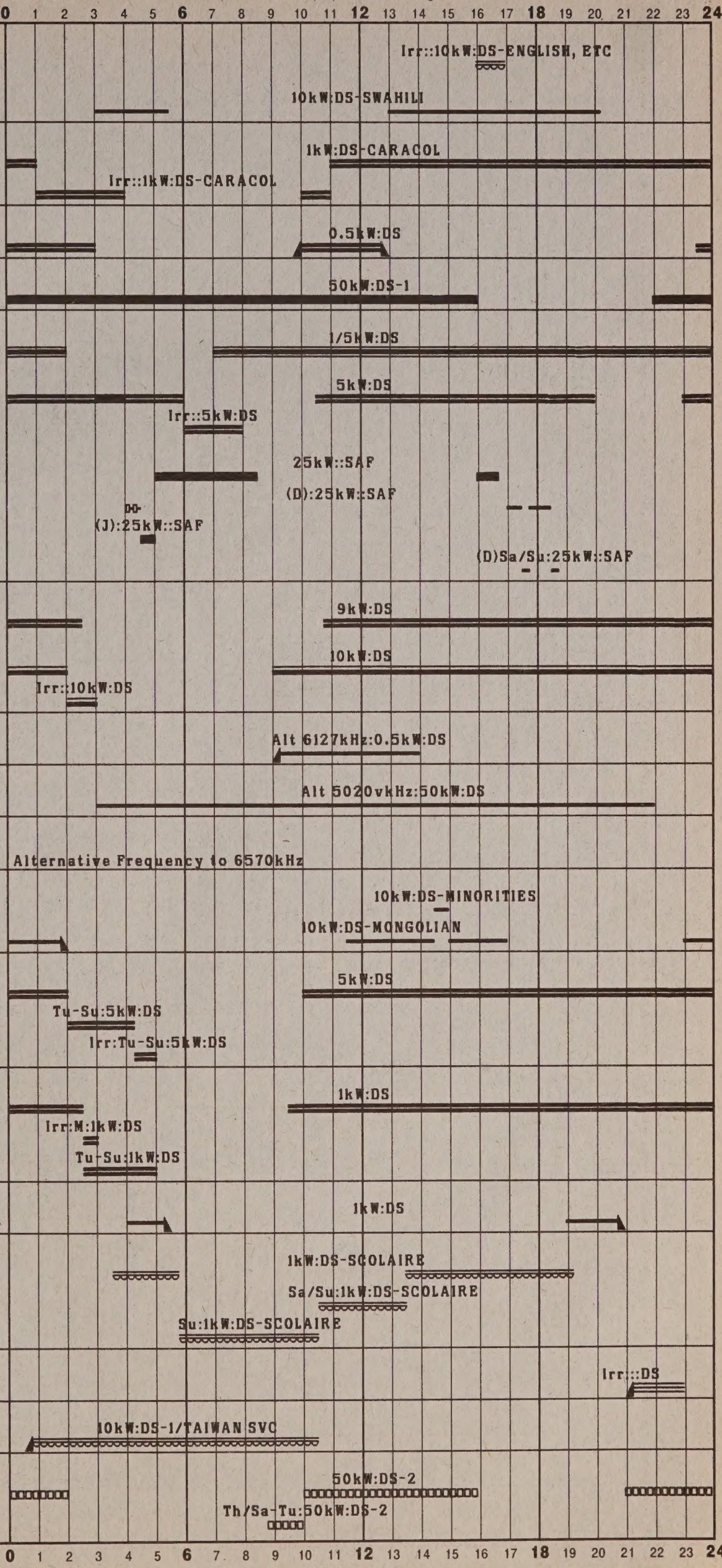

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5050 (con'd)	**INDIA** ALL INDIA RADIO Aizawl	Irr::10kW:DS-ENGLISH, ETC
	TANZANIA RADIO TANZANIA Dar es Salaam	10kW:DS-SWAHILI
5050v	**COLOMBIA** LA VOZ DE YOPAL Yopal	1kW:DS-CARACOL Irr::1kW:DS-CARACOL
5050.3	**PERU** RADIO CANGALLO Cangallo	0.5kW:DS
5052	**SINGAPORE** SINGAPORE BC CORP Jurong	50kW:DS-1
5055	**BRAZIL** RADIO MAUA Rio de Janeiro	1/5kW:DS
	COSTA RICA FARO DEL CARIBE San José	5kW:DS Irr::5kW:DS
	SWAZILAND TRANS WORLD RADIO Manzini	25kW::SAF (D):25kW::SAF (J):25kW::SAF (D)Sa/Su:25kW::SAF
5055v	**ECUADOR** RADIO CATOLICA Quito	9kW:DS
	FRENCH GUIANA RFO-GUYANE Cayenne	10kW:DS Irr::10kW:DS
5055.4	**INDONESIA** R REP INDONESIA Nabire, Irian Jaya	Alt 6127kHz:0.5kW:DS
5057v	**ALBANIA** SHQIPTAR RTV Gjirokastër	Alt 5020vkHz:50kW:DS
5060	**BURMA** BURMESE ARMY STN Taunggyi	Alternative Frequency to 6570kHz
	CHINA (PR) CENTRAL PEOPLES BS Changji	10kW:DS-MINORITIES
	XINJIANG PBS Changji	10kW:DS-MONGOLIAN
5060v	**ECUADOR** R NAC PROGRESO Loja	5kW:DS Tu-Su:5kW:DS Irr:Tu-Su:5kW:DS
5060.3	**PERU** RADIO AMAZONAS Iquitos	1kW:DS Irr:M:1kW:DS Tu-Su:1kW:DS
5061v	**ANGOLA** ER DO HUAMBO Huambo	1kW:DS
5066v	**ZAIRE** RADIO CANDIP Bunia	1kW:DS-SCOLAIRE Sa/Su:1kW:DS-SCOLAIRE Su:1kW:DS-SCOLAIRE
5068	**SAUDI ARABIA** BS OF THE KINGDOM	Irr:::DS
5070	**CHINA (PR)** FUJIAN PEOPLES BS Fuzhou	10kW:DS-1/TAIWAN SVC
5075	**CHINA (PR)** CENTRAL PEOPLES BS Urümqi	50kW:DS-2 Th/Sa-Tu:50kW:DS-2

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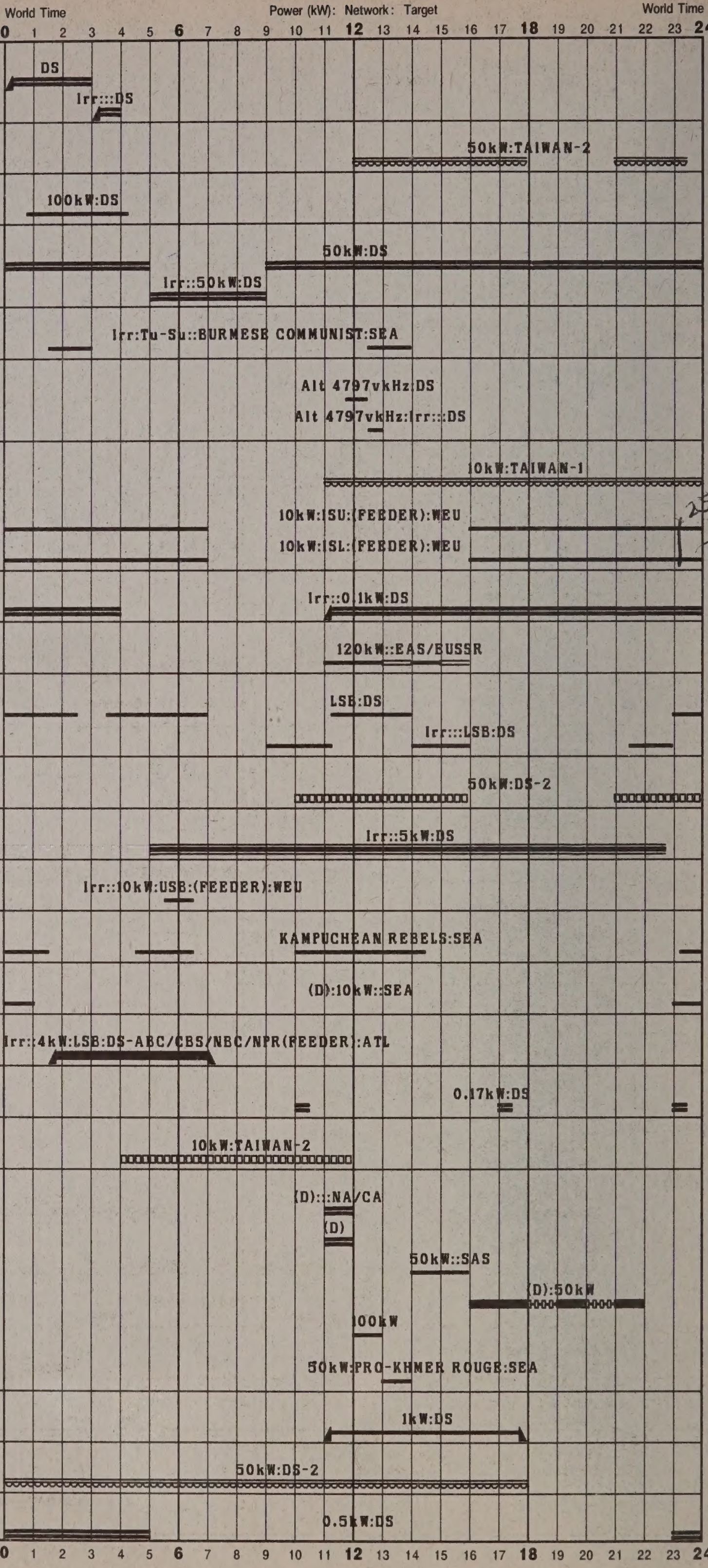

Frequency (kHz)	Country / Station / Location	
5084.7	PERU RADIO CELENDIN Celendín	DS Irr:::DS
5090	CHINA (PR) CENTRAL PEOPLES BS Xi'an	50kW:TAIWAN-2
5094v	PAKISTAN PAKISTAN BC CORP Islamabad	100kW:DS
5095	COLOMBIA RADIO SUTATENZA Bogotá	50kW:DS Irr::50kW:DS
5109	CLANDESTINE (ASIA) "VO BURMESE PEOPLE	Irr:Tu-Su::BURMESE COMMUNIST:SEA
5120v	VIETNAM NGHIA BIN BS Nghia Binh	Alt 4797vkHz:DS Alt 4797vkHz:Irr:::DS
5125	CHINA (PR) CENTRAL PEOPLES BS Beijing	10kW:TAIWAN-1
	USA RFE-RL Via Holzkirchen,GFR	10kW:ISU:(FEEDER):WEU 10kW:ISL:(FEEDER):WEU
5132v	PERU RADIO VISION Juanjuí	Irr::0.1kW:DS
5145	CHINA (PR) RADIO BEIJING Beijing	120kW::EAS/BUSSR
5160	LAOS LAO NATIONAL RADIO Vientiane	LSB:DS Irr:::LSB:DS
5163	CHINA (PR) CENTRAL PEOPLES BS Xi'an	50kW:DS-2
5192v	ANGOLA EP DO MOXICO Luena	Irr::5kW:DS
5195	GERMANY (FR) DEUTSCHE WELLE Elmshorn	Irr::10kW:USB:(FEEDER):WEU
5200v	CLANDESTINE (ASIA) "VO NATIONAL ARMY" Southern Laos	KAMPUCHEAN REBELS:SEA
5220	CHINA (PR) RADIO BEIJING Beijing	(D):10kW::SEA
5230.3	USA AFRTS-US MILITARY Via Barford, UK	Irr::4kW:LSB:DS-ABC/CBS/NBC/NPR(FEEDER):ATL
5235	PERU S ANTONIO DE PADUA Arequipa	0.17kW:DS
5240	CHINA (PR) VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-2
5250	CHINA (PR) RADIO BEIJING	(D):::NA/CA (D)
	RADIO BEIJING Beijing	50kW::SAS (D):50kW
	RADIO BEIJING Urümqi	100kW
	CLANDESTINE (ASIA) "VO DEM KAMPUCHEA" Beijing, China (PR)	50kW:PRO-KHMER ROUGE:SEA
5256.4	INDONESIA R REP INDONESIA Sibolga, Sumatera	1kW:DS
5260	USSR KAZAKH RADIO Alma-Ata	50kW:DS-2
5273.8	PERU RADIO ONDA POPULAR Bambamarca	0.5kW:DS

25 DEC 87
Russian

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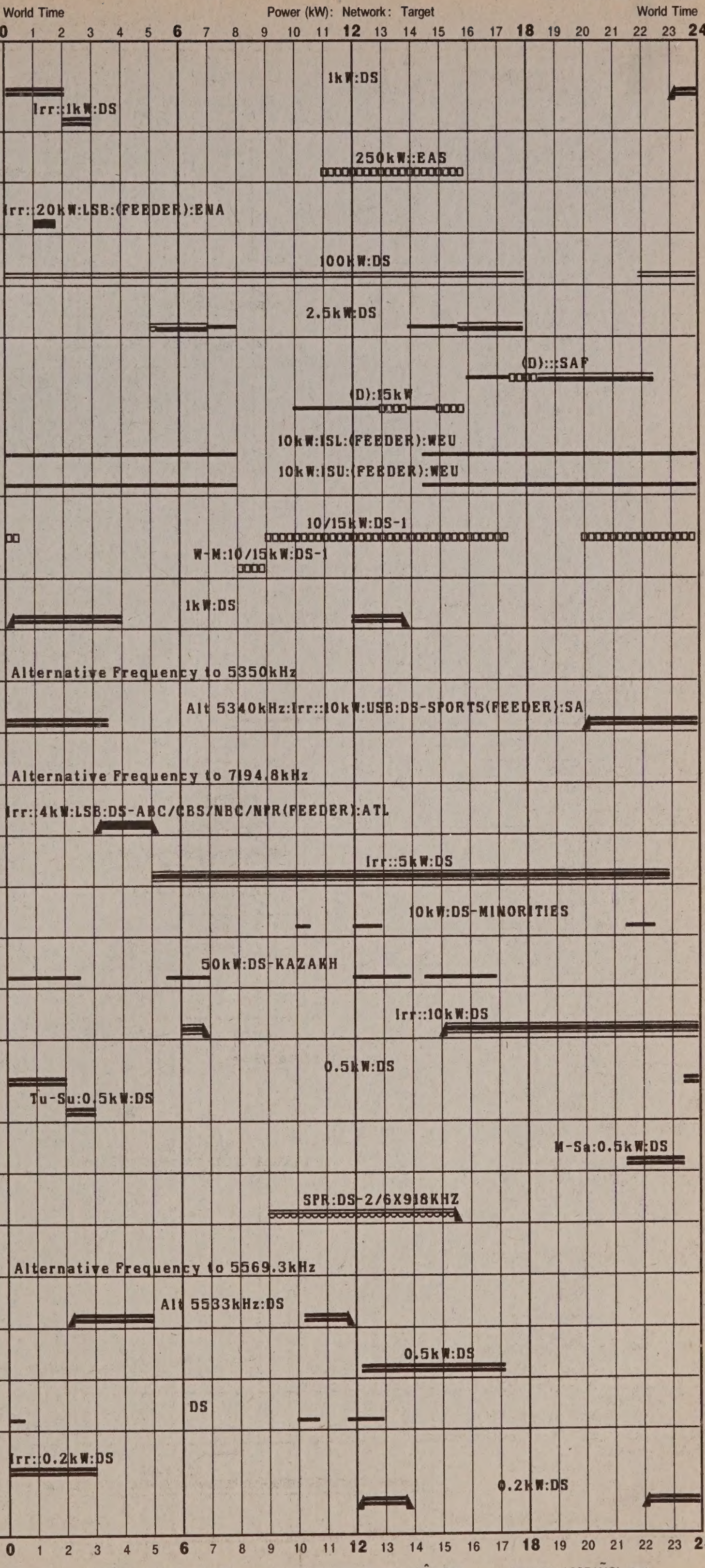
ARABIC / عربي ≡ RUSSIAN / РУССКИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5274.4	PERU RADIO SAN JUAN Chota	1kW:DS Irr::1kW:DS
5275	USA WYFR-FAMILY RADIO Via China (Taiwan)	250kW::EAS
5280	GERMANY (FR) DEUTSCHE WELLE Elmshorn	Irr::20kW:LSB:(FEEDER):ENA
5290	USSR KRASNOYARSK RADIO Krasnoyarsk	100kW:DS
5290v	CHAD RADIO MOUNDOU Moundou	2.5kW:DS
5295	CHINA (PR) RADIO BEIJING	(D):::SAF
	RADIO BEIJING Beijing	(D):15kW
	USA RFE-RL Via Holzkirchen,GFR	10kW:ISL:(FEEDER):WEU 10kW:ISU:(FEEDER):WEU
5320	CHINA (PR) CENTRAL PEOPLES BS Beijing	10/15kW:DS-1 W-M:10/15kW:DS-1
5325v	PERU RADIO ACOBAMBA Acobamba	1kW:DS
5340	PARAGUAY R 1 DE MARZO, ETC Asunción	Alternative Frequency to 5350kHz
5350	PARAGUAY R 1 DE MARZO, ETC Asunción	Alt 5340kHz:Irr::10kW:USB:DS-SPORTS(FEEDER):SA
5365.3	CLANDESTINE (C AMER) '15 DE SETIEMBRE' Honduras	Alternative Frequency to 7194.8kHz
5376.8	USA AFRTS-US MILITARY Via Barford, UK	Irr::4kW:LSB:DS-ABC/CBS/NBC/NPR(FEEDER):ATL
5405v	ANGOLA EP DE NAMIBE Moçâmedes	Irr::5kW:DS
5420	CHINA (PR) CENTRAL PEOPLES BS Beijing	10kW:DS-MINORITIES
5440	CHINA (PR) XINJIANG PBS Urümqi	50kW:DS-KAZAKH
5475.5	GUINEA-BISSAU RADIO NACIONAL Bissau	Irr::10kW:DS
5505	BOLIVIA RADIO 2 DE FEBRERO Rurrenabaque	0.5kW:DS Tu-Su:0.5kW:DS
5505v	BOLIVIA RADIO 2 DE FEBRERO Rurrenabaque	M-Sa:0.5kW:DS
5508	CHINA (PR) VO THE STRAIT-PLA Fuzhou	SPR:DS-2/6X918KHZ
5533	COLOMBIA RADIO NUEVA VIDA Cúcuta	Alternative Frequency to 5569.3kHz
5569.3	COLOMBIA RADIO NUEVA VIDA Cúcuta	Alt 5533kHz:DS
5581.3	BOLIVIA RADIO SAN JOSE San José Chiquitos	0.5kW:DS
5610v	VIETNAM HOANG LIEN SON BS Hoang Lien Son	DS
5618v	PERU RADIO ILUCAN Cutervo	Irr::0.2kW:DS 0.2kW:DS

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
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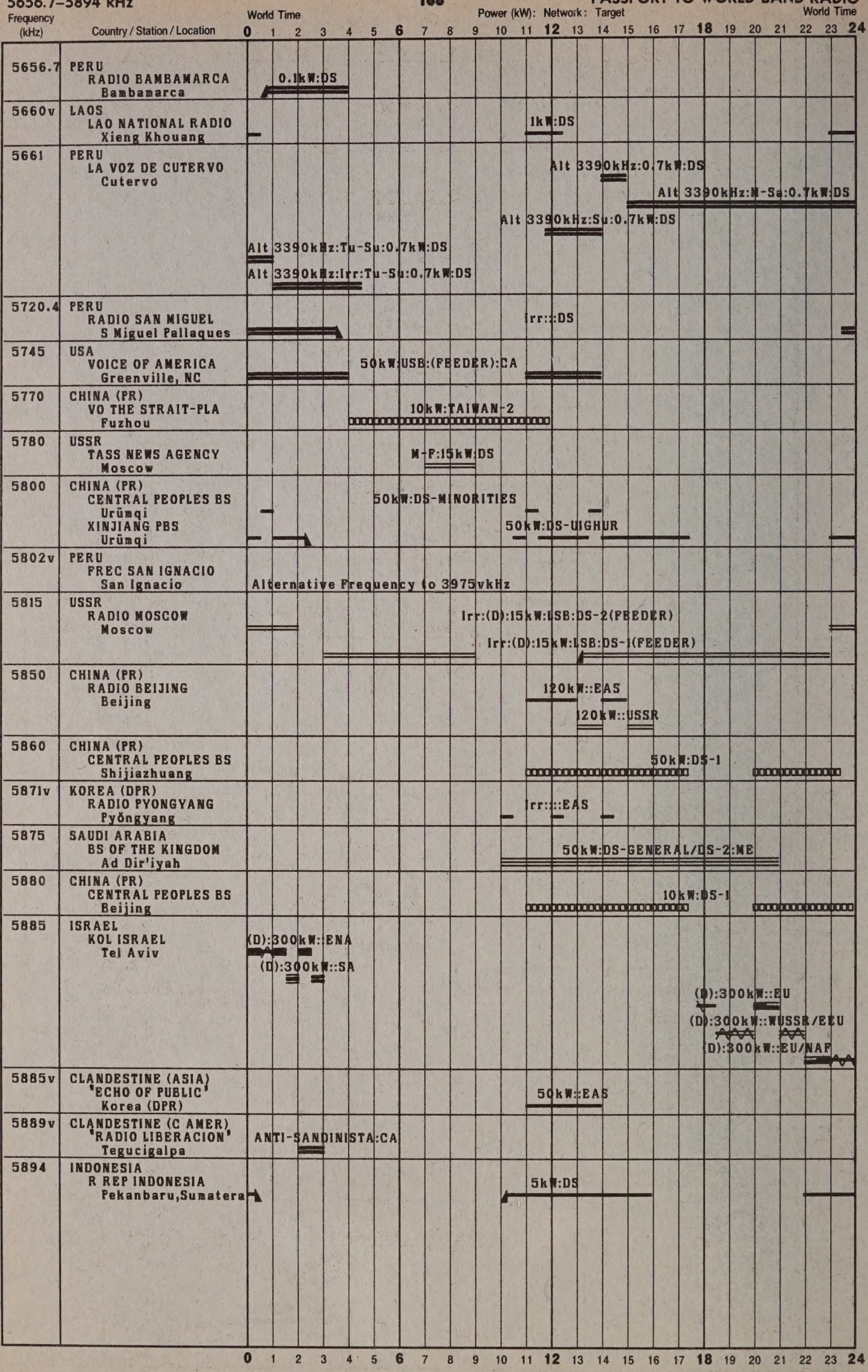
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5656.7	PERU RADIO BAMBAMARCA Bambamarca	0.1kW:DS
5660v	LAOS LAO NATIONAL RADIO Xieng Khouang	1kW:DS
5661	PERU LA VOZ DE CUTERVO Cutervo	Alt 3390kHz:0.7kW:DS Alt 3390kHz:M-Sa:0.7kW:DS Alt 3390kHz:Su:0.7kW:DS Alt 3390kHz:Tu-Su:0.7kW:DS Alt 3390kHz:Irr:Tu-Su:0.7kW:DS
5720.4	PERU RADIO SAN MIGUEL S Miguel Pallaques	Irr::DS
5745	USA VOICE OF AMERICA Greenville, NC	50kW:USB:(FEEDER):CA
5770	CHINA (PR) VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-2
5780	USSR TASS NEWS AGENCY Moscow	M-F:15kW:DS
5800	CHINA (PR) CENTRAL PEOPLES BS Urümqi XINJIANG PBS Urümqi	50kW:DS-MINORITIES 50kW:DS-UIGHUR
5802v	PERU FREC SAN IGNACIO San Ignacio	Alternative Frequency to 3975vkHz
5815	USSR RADIO MOSCOW Moscow	Irr:(D):15kW:LSB:DS-2(FEEDER) Irr:(D):15kW:LSB:DS-1(FEEDER)
5850	CHINA (PR) RADIO BEIJING Beijing	120kW::EAS 120kW::USSR
5860	CHINA (PR) CENTRAL PEOPLES BS Shijiazhuang	50kW:DS-1
5871v	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	Irr:::EAS
5875	SAUDI ARABIA BS OF THE KINGDOM Ad Dir'iyah	50kW:DS-GENERAL/DS-2:ME
5880	CHINA (PR) CENTRAL PEOPLES BS Beijing	10kW:DS-1
5885	ISRAEL KOL ISRAEL Tel Aviv	(D):300kW::ENA (D):300kW::SA (D):300kW::EU (D):300kW::WUSSR/EEU (D):300kW::EU/NAF
5885v	CLANDESTINE (ASIA) "ECHO OF PUBLIC" Korea (DPR)	50kW::EAS
5889v	CLANDESTINE (C AMER) "RADIO LIBERACION" Tegucigalpa	ANTI-SANDINISTA:CA
5894	INDONESIA R REP INDONESIA Pekanbaru,Sumatera	5kW:DS

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ☰
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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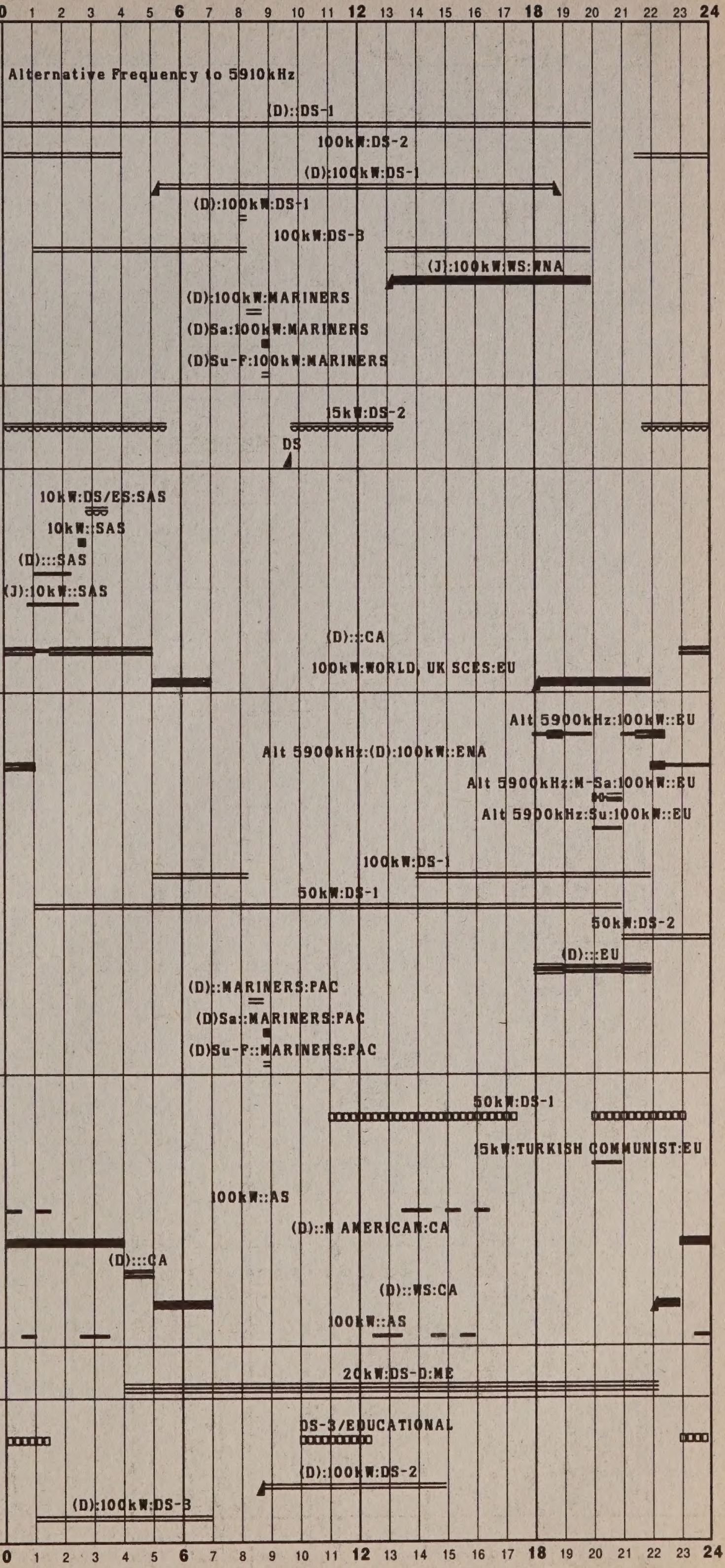
Frequency (kHz) | Country / Station / Location | World Time | Power (kW): Network: Target | World Time



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5900	BELGIUM BELGISCHE RADIO TV Wavre	Alternative Frequency to 5910kHz
	USSR RADIO MOSCOW	(D)::DS-1
	RADIO MOSCOW Kenga	100kW:DS-2 (D):100kW:DS-1
	RADIO MOSCOW Petropavlovsk-Kam	(D):100kW:DS-1
	RADIO MOSCOW Vologda	100kW:DS-3
	RADIO MOSCOW/RP&P Petropavlovsk-Kam	(J):100kW:WS:WNA
	RADIO TIKHIY OKEAN Petropavlovsk-Kam	(D):100kW:MARINERS (D)Sa:100kW:MARINERS (D)Su-F:100kW:MARINERS
5900v	CHINA (PR) SICHUAN PEOPLES BS Chengdu	15kW:DS-2
	UNIDENTIFIED Via Sichuan PBS?	DS
5905	PAKISTAN PAKISTAN BC CORP Islamabad	10kW:DS/ES:SAS
	RADIO PAKISTAN Islamabad	10kW::SAS
	+RADIO PAKISTAN Islamabad	(D):::SAS
	RADIO PAKISTAN Islamabad	(J):10kW::SAS
	USSR RADIO MOSCOW/RP&P	(D):::CA
	RADIO MOSCOW/RP&P Ryazan'	100kW:WORLD, UK SCES:EU
5910	BELGIUM BELGISCHE RADIO TV Wavre	Alt 5900kHz:100kW::EU Alt 5900kHz:(D):100kW::ENA Alt 5900kHz:M-Sa:100kW::EU Alt 5900kHz:Su:100kW::EU
	USSR RADIO MOSCOW Chita	100kW:DS-1
	RADIO MOSCOW Moscow	50kW:DS-1 50kW:DS-2
	RADIO MOSCOW/RP&P	(D):::EU
	RADIO TIKHIY OKEAN	(D)::MARINERS:PAC (D)Sa::MARINERS:PAC (D)Su-F::MARINERS:PAC
5915	CHINA (PR) CENTRAL PEOPLES BS Beijing	50kW:DS-1
	CLANDESTINE (EUROPE) 'OUR RADIO' Cluj, Romania	15kW:TURKISH COMMUNIST:EU
	USSR RADIO ALMA-ATA Alma-Ata	100kW::AS
	RADIO MOSCOW/RP&P	(D)::N AMERICAN:CA (D):::CA (D)::WS:CA
	RADIO TASHKENT Alma-Ata	100kW::AS
5915v	ISRAEL KOL ISRAEL Tel Aviv	20kW:DS-D:ME
5920	CHINA (PR) GUANGXI PBS Guangzhou	DS-3/EDUCATIONAL
	USSR RADIO MOSCOW Khabarovsk	(D):100kW:DS-2
(con'd)	RADIO MOSCOW Orcha	(D):100kW:DS-3

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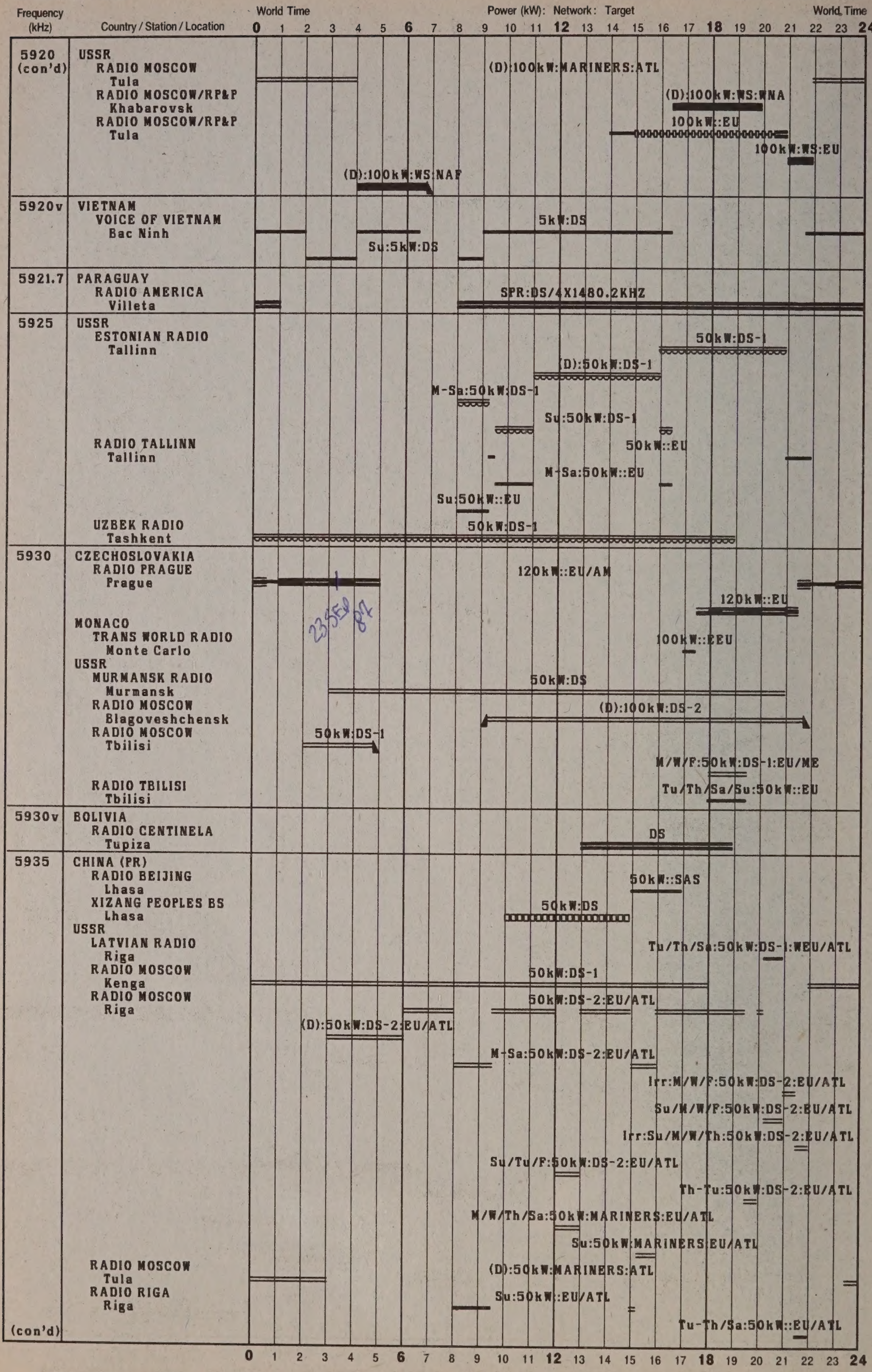

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5920 (con'd)	**USSR**	
	RADIO MOSCOW Tula	(D):100kW:MARINERS:ATL
	RADIO MOSCOW/RP&P Khabarovsk	(D):100kW:WS:WNA
	RADIO MOSCOW/RP&P Tula	100kW::EU 100kW:WS:EU (D):100kW:WS:NAF
5920v	**VIETNAM**	
	VOICE OF VIETNAM Bac Ninh	5kW:DS Su:5kW:DS
5921.7	**PARAGUAY**	
	RADIO AMERICA Villeta	SPR:DS/4X1480.2KHZ
5925	**USSR**	
	ESTONIAN RADIO Tallinn	50kW:DS-1 (D):50kW:DS-1 M-Sa:50kW:DS-1 Su:50kW:DS-1
	RADIO TALLINN Tallinn	50kW::EU M-Sa:50kW::EU Su:50kW::EU
	UZBEK RADIO Tashkent	50kW:DS-1
5930	**CZECHOSLOVAKIA**	
	RADIO PRAGUE Prague	120kW::EU/AM 120kW::EU
	MONACO	
	TRANS WORLD RADIO Monte Carlo	100kW::EEU
	USSR	
	MURMANSK RADIO Murmansk	50kW:DS
	RADIO MOSCOW Blagoveshchensk	(D):100kW:DS-2
	RADIO MOSCOW Tbilisi	50kW:DS-1
	RADIO TBILISI Tbilisi	M/W/F:50kW:DS-1:EU/ME Tu/Th/Sa/Su:50kW::EU
5930v	**BOLIVIA**	
	RADIO CENTINELA Tupiza	DS
5935	**CHINA (PR)**	
	RADIO BEIJING Lhasa	50kW::SAS
	XIZANG PEOPLES BS Lhasa	50kW:DS
	USSR	
	LATVIAN RADIO Riga	Tu/Th/Sa:50kW:DS-1:WEU/ATL
	RADIO MOSCOW Kenga	50kW:DS-1
	RADIO MOSCOW Riga	50kW:DS-2:EU/ATL (D):50kW:DS-2:EU/ATL M-Sa:50kW:DS-2:EU/ATL Irr:M/W/F:50kW:DS-2:EU/ATL Su/M/W/F:50kW:DS-2:EU/ATL Irr:Su/M/W/Th:50kW:DS-2:EU/ATL Su/Tu/F:50kW:DS-2:EU/ATL Th-Tu:50kW:DS-2:EU/ATL M/W/Th/Sa:50kW:MARINERS:EU/ATL Su:50kW:MARINERS:EU/ATL
	RADIO MOSCOW Tula	(D):50kW:MARINERS:ATL
	RADIO RIGA Riga	Su:50kW::EU/ATL Tu-Th/Sa:50kW::EU/ATL
(con'd)		

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ≈ OTHER ─
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
5935 (con'd)	USSR RADIO RIGA Riga	Tu/Th/Sa:50kW::EU/ATL Tu/Th/Sa/Su:50kW::EU/ATL W:50kW::EU/ATL
5935v	CHINA (PR) RADIO BEIJING Lhasa	50kW::SAS
	XIZANG PEOPLES BS Lhasa	50kW:DS
5940	UNIDENTIFIED Middle East	VO CRUSADER?:ME
	USSR MAGADAN RADIO Magadan	50kW:DS
	RADIO MOSCOW Syzran'	(D):100kW:DS-2
	RADIO MOSCOW/RP&P	(D)::N AMERICAN:ENA
	RADIO MOSCOW/RP&P Petropavlovsk-Kam	(D):100kW::EAS
	RADIO MOSCOW/RP&P Serpuhkov	(J):120kW:WS, GREEK, ETC:EU
5940v	COLOMBIA CARACOL CARRENO Puerto Carreño	Irr::10kW:DS-CARACOL 10kW:DS-CARACOL
5945	AUSTRIA RADIO AUSTRIA INTL Vienna	100kW::EU (D):100kW::EU M-F:100kW::EU M-Sa:100kW::EU (D)M-Sa:100kW::EU Sa/Su:100kW::EU Su:100kW::EU (D)Su:100kW::EU
	MONACO TRANS WORLD RADIO Monte Carlo	100kW::EU Su:100kW::EU
	USSR RADIO MOSCOW	(J)::DS-2
	RADIO MOSCOW Komsomol'sk'Amure	15kW:USB:DS-1(FEEDER)
	RADIO MOSCOW/RP&P	(D):::EU (D)::WS:EU (D)::WS, SWEDISH, ETC:EU
	RADIO TASHKENT Frunze, Kirgiziya	100kW::SAS/ME (D):100kW::SAS/ME
5949.3	PERU RADIO AREQUIPA Arequipa	1kW:DS
5950	CHINA (PR) HEILONGJIANG PBS Harbin	50kW:DS-1
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::ENA (D):100kW::ENA
	GUYANA GUYANA BC CORP Georgetown	10kW:DS-2 Irr::10kW:DS-2
	USSR RADIO MOSCOW Leningrad	(D):100kW:MARINERS:ATL
	RADIO MOSCOW/RP&P Petropavlovsk-Kam	(D):100kW::EAS/PAC
	RADIO MOSCOW/RP&P Voronej	500kW::EEU (D):500kW::EU
(con'd)		

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ARABIC / عربي ≡ RUSSIAN / РУССКИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▤ MULTILINGUAL ▤ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING ΛΛ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5950 (con'd)	USSR RADIO TIKHIY OKEAN Petropavlovsk-Kam	100kW:MARINERS:EAS/PAC Sa:100kW:MARINERS:EAS/PAC Su-F:100kW:MARINERS:EAS/PAC
5950v	CLANDESTINE (C AMER) "R 15 SETIEMBRE" Honduras	FDN/ANTI-SANDINIST:CA
5954.2	COSTA RICA RADIO CASINO Limón	Irr::0.7kW:DS Irr:M:0.7kW:DS Irr:Tu-Su:0.7kW:DS
5954.4	BOLIVIA RADIO PIO DOCE Llallagua-Siglo XX	1kW:DS-SPANISH, ETC M-Sa:1kW:DS-SPANISH, ETC
5954.8	COLOMBIA LA VOZ CENTAUROS Villavicencio	5kW:DS-CARACOL Irr::5kW:DS-TOUR DE FRANCE
5955	BOTSWANA RADIO BOTSWANA Gaborone	50kW:DS-ENGLISH, ETC
	BRAZIL RADIO GAZETA São Paulo	7.5kW:DS
	CAMEROON RADIO CAMEROON Bafoussam	20kW:DS-FRENCH,ENG,ETC Sa/Su:20kW:DS-FRENCH,ENG,ETC
	GUATEMALA RADIO CULTURAL Guatemala City	0.25/10kW:DS
	HOLLAND RADIO NEDERLAND Flevoland	500kW::EU Su:500kW::EU
	SWAZILAND TRANS WORLD RADIO Manzini	(D):25kW::SAF
	TURKEY TURKISH RTV CORP Ankara	(J):250kW::EU
	USA RFE-RL Via Germany (FR)	(J):20/250kW::WUSSR (D):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	250kW::EEU (D):250kW::EEU
5955.3	PERU RADIO HUANCAYO Huancayo	0.5kW:DS
5960	CANADA RADIO CANADA INTL Sackville, NB	(J):250kW::ENA/CA (D):250kW::ENA/CA M-F:250kW::CA (D)Su/M:250kW::ENA/CA (J)Su/M:250kW::ENA/CA (D)Tu-Sa:250kW::ENA/CA (J)Tu-Sa:250kW::ENA/CA
	CHINA (PR) YUNNAN PEOPLES BS Kunming	50kW:DS-2
	CLANDESTINE (M EAST) "VO THE CRUSADER" Via Radio Baghdad	MOJAHEDIN-E KHALQ:ME
(con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::EU

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
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SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz) | Country / Station / Location

5960 (con'd)

GERMANY (FR)
DEUTSCHE WELLE
Jülich/Türkheim-W'l
INDIA
RADIO KASHMIR
Jammu
ITALY
RTV ITALIANA
Rome
JAPAN
RADIO JAPAN/NHK
Via Sackville, Can
MONGOLIA
RADIO ULAN BATOR
Ulan Bator
ROMANIA
RADIO BUCHAREST
Bucharest
TURKEY
TURKISH RTV CORP
Ankara
UNITED ARAB EMIRATES
VOICE OF THE UAE
Abu Dhabi
USA
WYFR-FAMILY RADIO
Okeechobee,Florida
USSR
KAZAKH RADIO
Alma-Ata
RADIO MOSCOW/RP&P
Sverdlovsk
RADIO MOSCOW/RP&P
Via Mongolia
RADIO MOSCOW/RP&P
Vladivostok

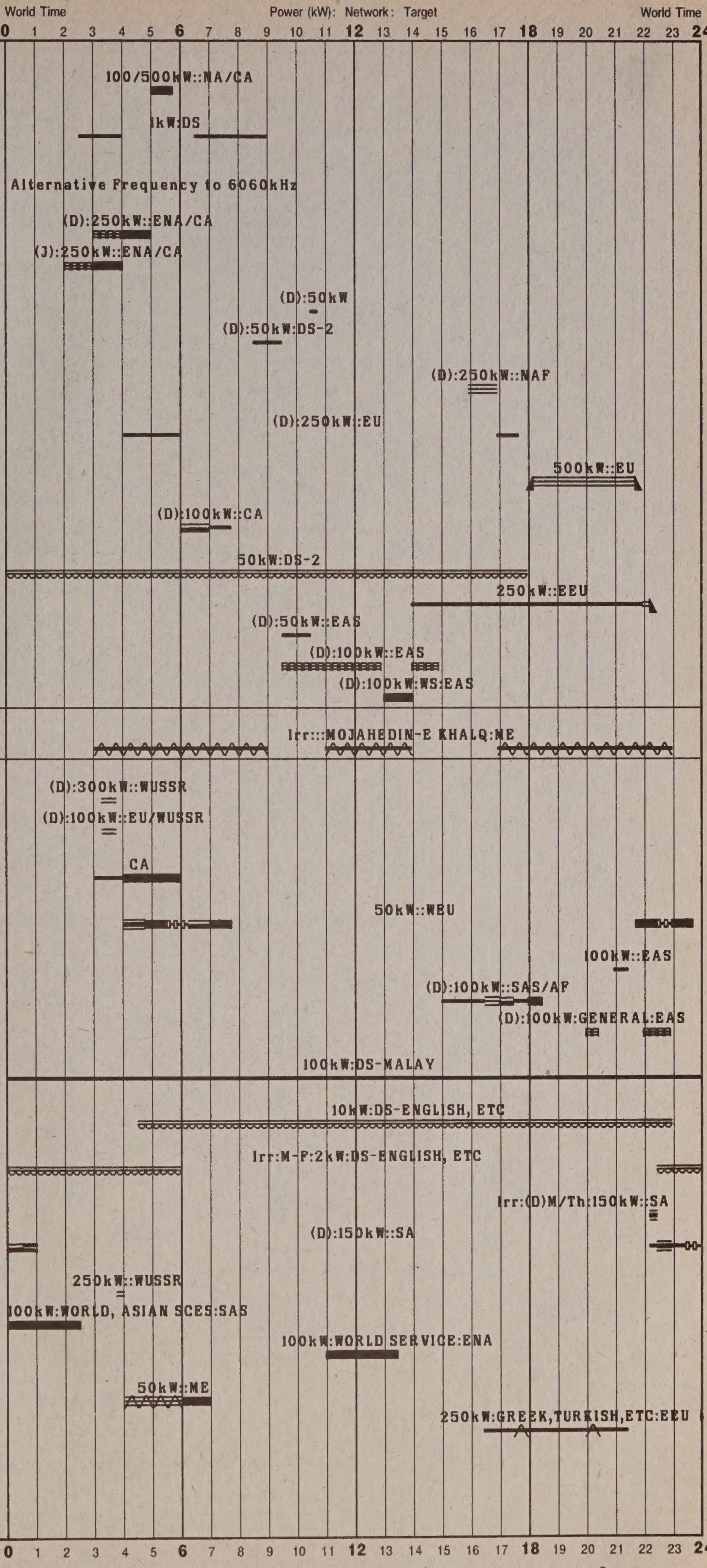
5960v

CLANDESTINE (M EAST)
'VO THE CRUSADER'
Eastern Iraq

5965

CANADA
RADIO CANADA INTL
Via United Kingdom
CUBA
RADIO HABANA
Havana
GERMANY (DR)
RADIO BERLIN INTL
Nauen
JAPAN
RADIO JAPAN/NHK
Tōkyō-Yamata
MALAYSIA
RADIO MALAYSIA
Kajang
NIGERIA
RADIO PLATEAU
Jos
PAPUA NEW GUINEA
R WESTERN HIGHLAND
Mount Hagen
SWITZERLAND
RED CROSS BC SVC
Schwarzenburg
SWISS RADIO INTL
Schwarzenburg
UNITED KINGDOM
BBC
Various Locations
BBC
Via Maşirah, Oman
BBC
Via Sackville, Can
USA
VOICE OF AMERICA
Via Rhodes, Greece
VOICE OF AMERICA
Via Woofferton, UK

(con'd)



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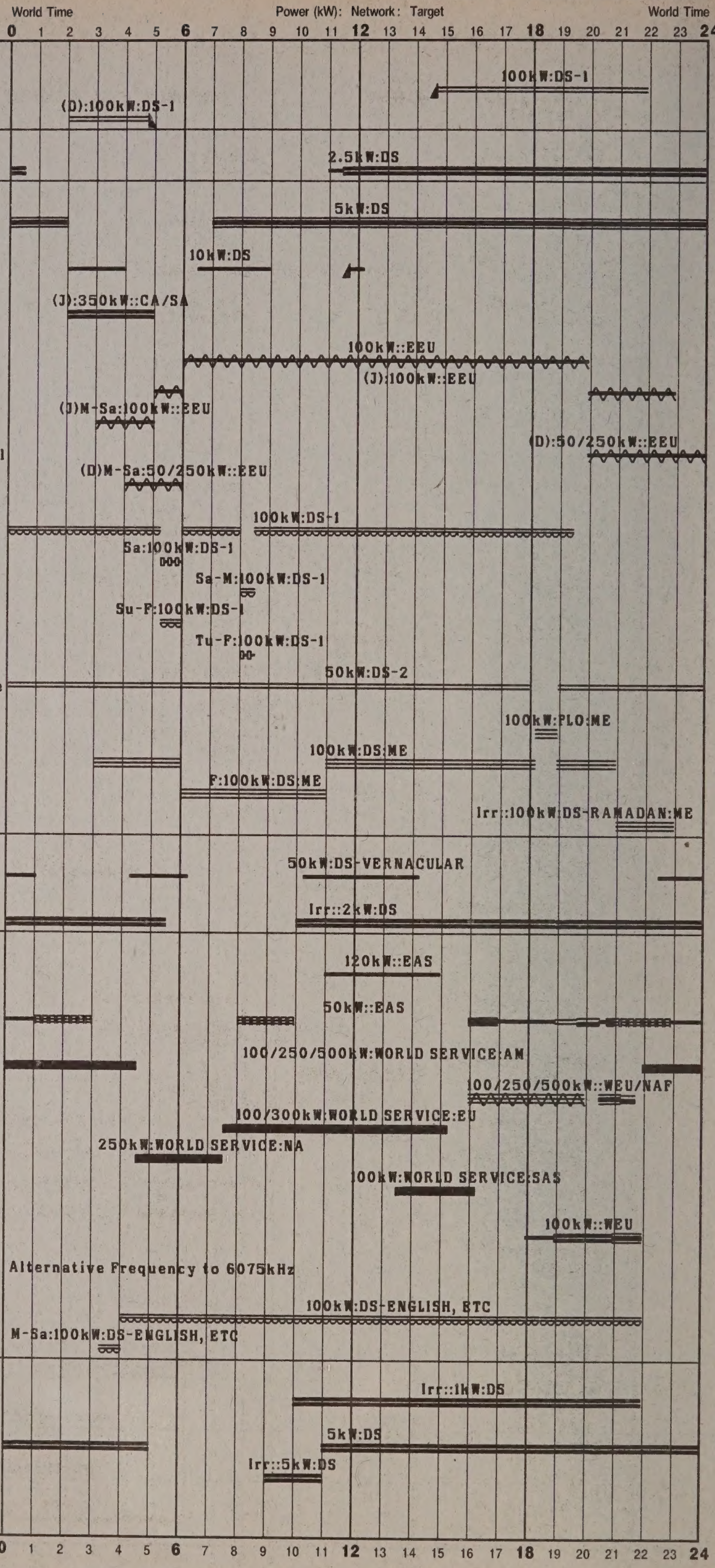
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5965 (con'd)	USSR RADIO MOSCOW Armavir	100kW:DS-1 (D):100kW:DS-1
5965v	BOLIVIA RADIO NACIONAL Huanuni	2.5kW:DS
5970	BRAZIL RADIO ITATIAIA Belo Horizonte	5kW:DS
	INDIA ALL INDIA RADIO Gauhati	10kW:DS
	SPAIN R EXTERIOR ESPANA Noblejas	(J):350kW::CA/SA
	USA RFE-RL Via Germany (FR)	100kW::EEU (J):100kW::EEU (J)M-Sa:100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU (D)M-Sa:50/250kW::EEU
	USSR KAZAKH RADIO Alma-Ata	100kW:DS-1 Sa:100kW:DS-1 Sa-M:100kW:DS-1 Su-F:100kW:DS-1 Tu-F:100kW:DS-1
	RADIO MOSCOW Komsomol'sk 'Amure	50kW:DS-2
	YEMEN (PDR) 'VO PALESTINE' Via PDR Yemen BC	100kW:PLO:ME
	PDR YEMEN BC SVC Aden	100kW:DS:ME F:100kW:DS:ME Irr::100kW:DS-RAMADAN:ME
5970v	CHINA (PR) GANSU PEOPLES BS Lanzhou	50kW:DS-VERNACULAR
	PERU RADIO EL SOL Lima	Irr::2kW:DS
5975	CHINA (PR) RADIO BEIJING Beijing	120kW::EAS
	KOREA (REPUBLIC) RADIO KOREA Suwŏn	50kW::EAS
	UNITED KINGDOM BBC Multiple Locations	100/250/500kW:WORLD SERVICE:AM
	BBC Various Locations	100/250/500kW::WEU/NAF 100/300kW:WORLD SERVICE:EU
	BBC Via Antigua	250kW:WORLD SERVICE:NA
	BBC Via Maşirah, Oman	100kW:WORLD SERVICE:SAS
	USSR RADIO MOSCOW/RP&P Minsk	100kW::WEU
	RADIO TASHKENT Tashkent	Alternative Frequency to 6075kHz
	ZIMBABWE ZIMBABWE BC CORP Gweru	100kW:DS-ENGLISH, ETC M-Sa:100kW:DS-ENGLISH, ETC
5975v	BOLIVIA RADIO NACIONAL Cochabamba	Irr::1kW:DS
	COLOMBIA RADIO MACARENA Villavicencio	5kW:DS Irr::5kW:DS



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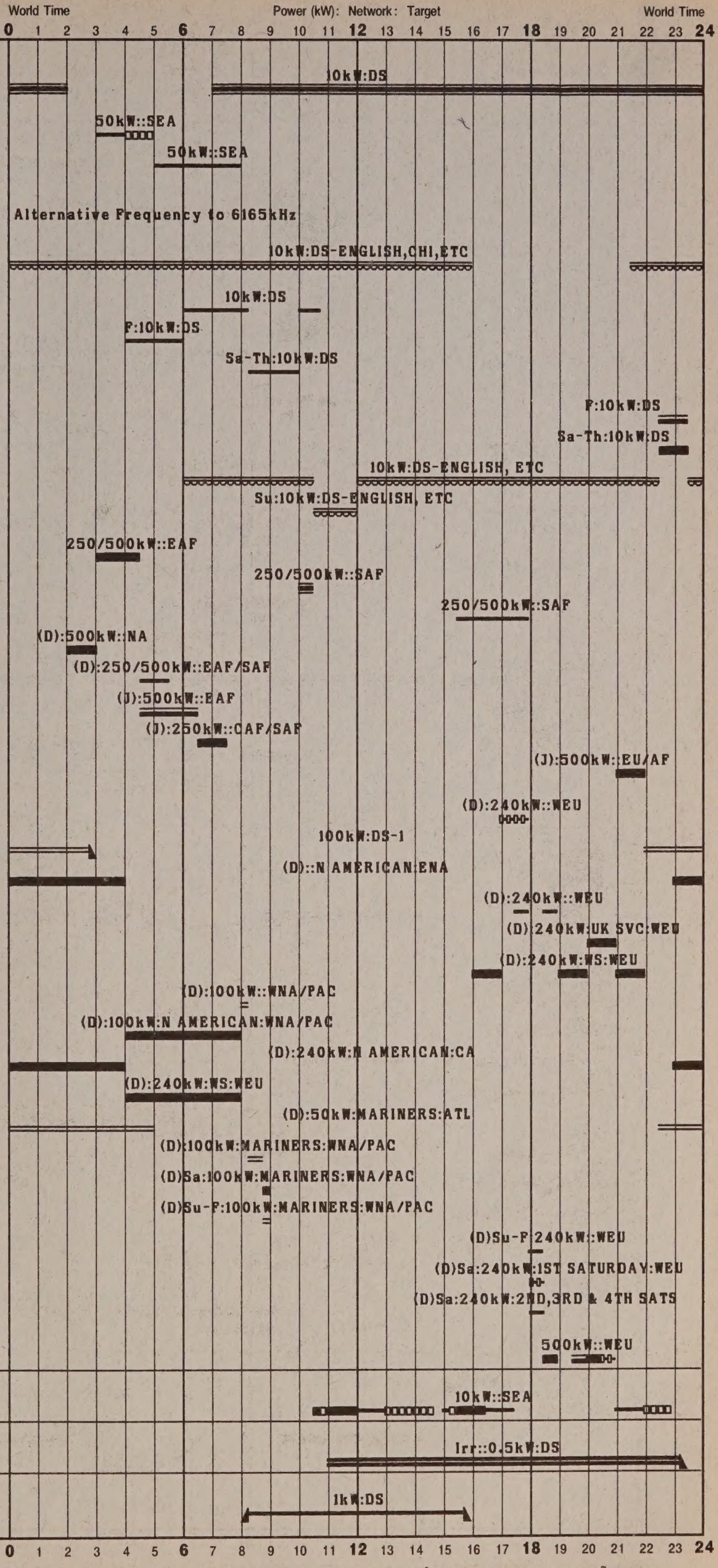
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5980	BRAZIL RADIO GUARUJA Florianópolis	10kW:DS
	CHINA (TAIWAN) VO FREE CHINA T'ai-pei	50kW::SEA
	VOICE FREE CHINA T'ai-pei	50kW::SEA
	ITALY RTV ITALIANA Rome	Alternative Frequency to 6165kHz
	MALAYSIA RTM-KOTA KINABALU Kota Kinabalu	10kW:DS-ENGLISH,CHI,ETC
	PAKISTAN PAKISTAN BC CORP Quetta	10kW:DS F:10kW:DS Sa-Th:10kW:DS
	SIERRA LEONE SIERRA LEONE BS Waterloo	F:10kW:DS Sa-Th:10kW:DS 10kW:DS-ENGLISH, ETC Su:10kW:DS-ENGLISH, ETC
	SOUTH AFRICA RADIO RSA Meyerton	250/500kW::EAF
	+RADIO RSA Meyerton	250/500kW::SAF
	RADIO RSA Meyerton	250/500kW::SAF (D):500kW::NA (D):250/500kW::EAF/SAF (J):500kW::EAF (J):250kW::CAF/SAF (J):500kW::EU/AF
	USSR RADIO KIEV Ryazan'	(D):240kW::WEU
	RADIO MOSCOW Novosibirsk	100kW:DS-1
	RADIO MOSCOW/RP&P	(D)::N AMERICAN:ENA
	RADIO MOSCOW/RP&P Moscow	(D):240kW::WEU (D):240kW:UK SVC:WEU (D):240kW:WS:WEU
	RADIO MOSCOW/RP&P Petropavlovsk	(D):100kW::WNA/PAC (D):100kW:N AMERICAN:WNA/PAC
	RADIO MOSCOW/RP&P Ryazan'	(D):240kW:N AMERICAN:CA (D):240kW:WS:WEU
	RADIO MOSCOW/RP&P Tula	(D):50kW:MARINERS:ATL
	RADIO TIKHIY OKEAN Petropavlovsk	(D):100kW:MARINERS:WNA/PAC (D)Sa:100kW:MARINERS:WNA/PAC (D)Su-F:100kW:MARINERS:WNA/PAC
	RS SOV BELORUSSIA Ryazan'	(D)Su-F:240kW::WEU (D)Sa:240kW:1ST SATURDAY:WEU (D)Sa:240kW:2ND,3RD & 4TH SATS
	YUGOSLAVIA RADIO YUGOSLAVIA Bijeljina	500kW::WEU
5980v	CHINA (TAIWAN) VOICE OF ASIA Kao-hsiung	10kW::SEA
5982v	MEXICO RADIO XEUJ Linares	Irr::0.5kW:DS
5983v	INDONESIA R REP INDONESIA Biak, Irian Jaya	1kW:DS



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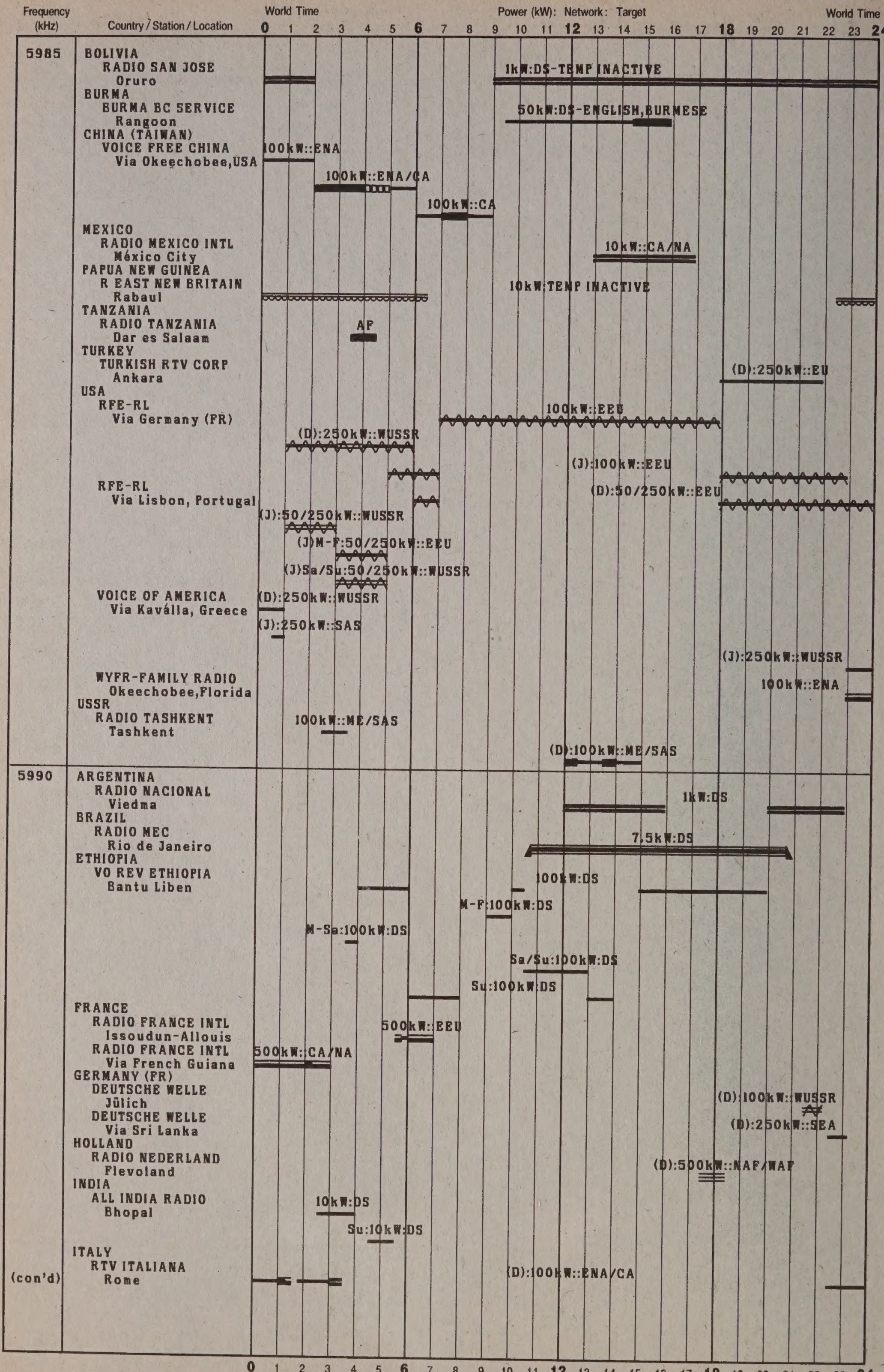
ARABIC / عربى ═ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 □□□□ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5985	**BOLIVIA** RADIO SAN JOSE Oruro	1kW:DS-TEMP INACTIVE
	BURMA BURMA BC SERVICE Rangoon	50kW:DS-ENGLISH,BURMESE
	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	100kW::ENA 100kW::ENA/CA 100kW::CA
	MEXICO RADIO MEXICO INTL México City	10kW::CA/NA
	PAPUA NEW GUINEA R EAST NEW BRITAIN Rabaul	10kW:TEMP INACTIVE
	TANZANIA RADIO TANZANIA Dar es Salaam	AF
	TURKEY TURKISH RTV CORP Ankara	(D):250kW::EU
	USA RFE-RL Via Germany (FR)	100kW::EEU (D):250kW::WUSSR (J):100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU (J):50/250kW::WUSSR (J)M-F:50/250kW::EEU (J)Sa/Su:50/250kW::WUSSR
	VOICE OF AMERICA Via Kavála, Greece	(D):250kW::WUSSR (J):250kW::SAS (J):250kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::ENA
	USSR RADIO TASHKENT Tashkent	100kW::ME/SAS (D):100kW::ME/SAS
5990	**ARGENTINA** RADIO NACIONAL Viedma	1kW:DS
	BRAZIL RADIO MEC Rio de Janeiro	7.5kW:DS
	ETHIOPIA VO REV ETHIOPIA Bantu Liben	100kW:DS M-F:100kW:DS M-Sa:100kW:DS Sa/Su:100kW:DS Su:100kW:DS
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	500kW::EEU
	RADIO FRANCE INTL Via French Guiana	500kW::CA/NA
	GERMANY (FR) DEUTSCHE WELLE Jülich	(D):100kW::WUSSR
	DEUTSCHE WELLE Via Sri Lanka	(D):250kW::SEA
	HOLLAND RADIO NEDERLAND Flevoland	(D):500kW::NAF/WAF
	INDIA ALL INDIA RADIO Bhopal	10kW:DS Su:10kW:DS
(con'd)	**ITALY** RTV ITALIANA Rome	(D):100kW::ENA/CA

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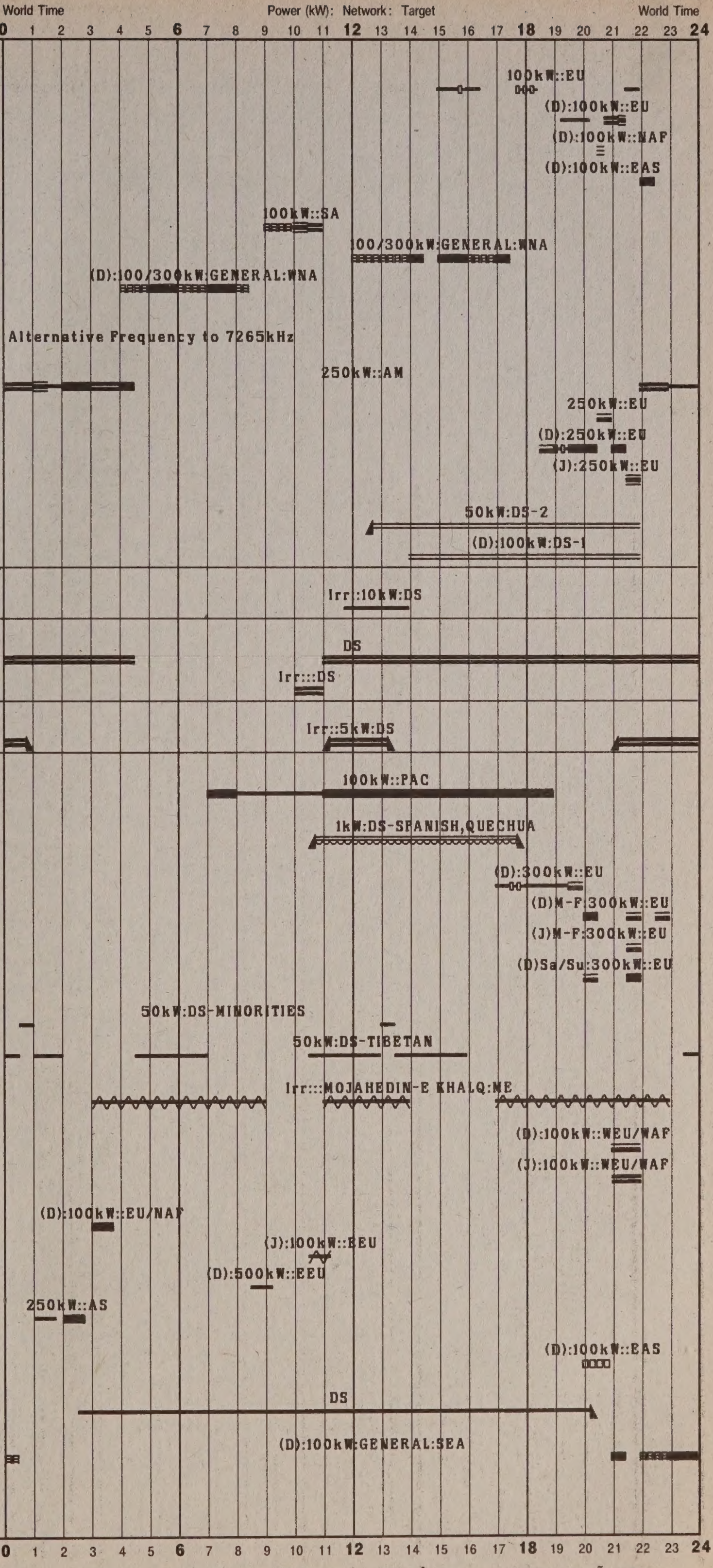
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5990 (con'd)	ITALY RTV ITALIANA Rome	100kW::EU (D):100kW::EU (D):100kW::NAF (D):100kW::EAS
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::SA 100/300kW:GENERAL:WNA (D):100/300kW:GENERAL:WNA
	NORWAY RADIO NORWAY INTL Kvitsøy	Alternative Frequency to 7265kHz
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AM 250kW::EU (D):250kW::EU (J):250kW::EU
	USSR RADIO MOSCOW Nikolayevsk 'Amure	50kW:DS-2
	RADIO MOSCOW Tbilisi	(D):100kW:DS-1
5990v	PAKISTAN AZAD KASHMIR RADIO Rawalpindi	Irr::10kW:DS
5991.5	COLOMBIA LA VOZ DEL ARIARI Grenada	DS Irr:::DS
5992	EL SALVADOR RADIO EL SALVADOR San Salvador	Irr::5kW:DS
5995	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC
	BOLIVIA RADIO LOYOLA Sucre	1kW:DS-SPANISH,QUECHUA
	CANADA RADIO CANADA INTL Via United Kingdom	(D):300kW::EU (D)M-F:300kW::EU (J)M-F:300kW::EU (D)Sa/Su:300kW::EU
	CHINA (PR) CENTRAL PEOPLES BS Lhasa	50kW:DS-MINORITIES
	XIZANG PEOPLES BS Lhasa	50kW:DS-TIBETAN
	CLANDESTINE (M EAST) 'VO THE CRUSADER' Eastern Iraq	Irr:::MOJAHEDIN-E KHALQ:ME
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(D):100kW::WEU/WAF (J):100kW::WEU/WAF
	GERMANY (FR) DEUTSCHE WELLE Jülich	(D):100kW::EU/NAF (J):100kW::EEU
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::EEU
	DEUTSCHE WELLE Via Sri Lanka	250kW::AS
	GUAM +ADVENTIST WORLD R Agat	(D):100kW::EAS
	IRAN VO THE ISLAMIC REP	DS
(con'd)	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	(D):100kW:GENERAL:SEA



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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ = CHINESE / 中文 ▭ JAPANESE / 日本語 ▨ MULTILINGUAL ▨ OTHER —
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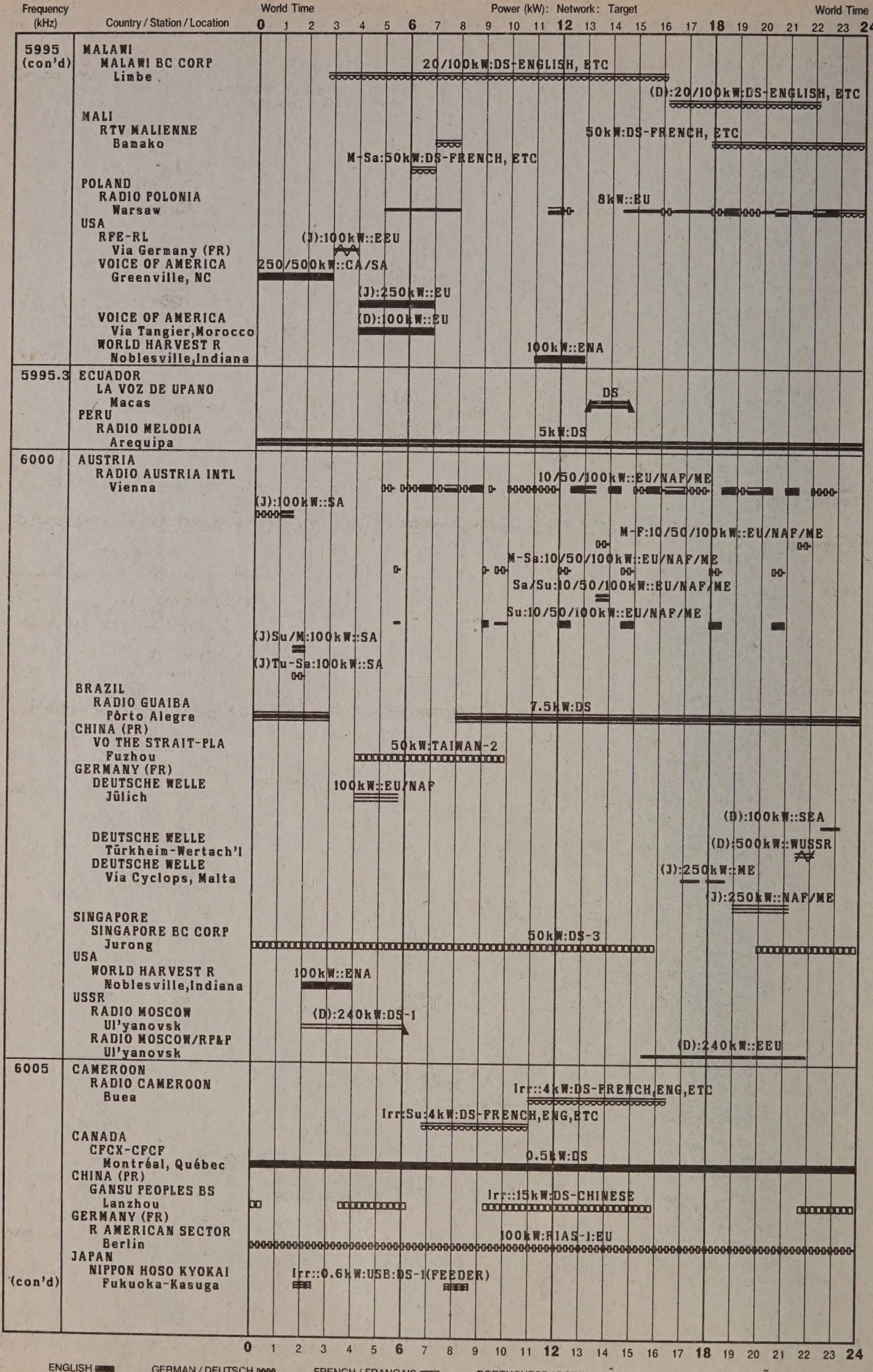

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
5995 (con'd)	**MALAWI** MALAWI BC CORP Limbe	20/100kW:DS-ENGLISH, ETC (D):20/100kW:DS-ENGLISH, ETC
	MALI RTV MALIENNE Bamako	50kW:DS-FRENCH, ETC M-Sa:50kW:DS-FRENCH, ETC
	POLAND RADIO POLONIA Warsaw	8kW::EU
	USA RFE-RL Via Germany (FR)	(J):100kW::EEU
	VOICE OF AMERICA Greenville, NC	250/500kW::CA/SA (J):250kW::EU (D):100kW::EU
	VOICE OF AMERICA Via Tangier,Morocco	
	WORLD HARVEST R Noblesville,Indiana	100kW::ENA
5995.3	**ECUADOR** LA VOZ DE UPANO Macas	DS
	PERU RADIO MELODIA Arequipa	5kW:DS
6000	**AUSTRIA** RADIO AUSTRIA INTL Vienna	10/50/100kW::EU/NAF/ME (J):100kW::SA M-F:10/50/100kW::EU/NAF/ME M-Sa:10/50/100kW::EU/NAF/ME Sa/Su:10/50/100kW::EU/NAF/ME Su:10/50/100kW::EU/NAF/ME (J)Su/M:100kW::SA (J)Tu-Sa:100kW::SA
	BRAZIL RADIO GUAIBA Pôrto Alegre	7.5kW:DS
	CHINA (PR) VO THE STRAIT-PLA Fuzhou	50kW:TAIWAN-2
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::EU/NAF
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):100kW::SEA (D):500kW::WUSSR
	DEUTSCHE WELLE Via Cyclops, Malta	(J):250kW::ME (J):250kW::NAF/ME
	SINGAPORE SINGAPORE BC CORP Jurong	50kW:DS-3
	USA WORLD HARVEST R Noblesville,Indiana	100kW::ENA
	USSR RADIO MOSCOW Ul'yanovsk	(D):240kW:DS-1
	RADIO MOSCOW/RP&P Ul'yanovsk	(D):240kW::EEU
6005	**CAMEROON** RADIO CAMEROON Buea	Irr::4kW:DS-FRENCH,ENG,ETC Irr:Su:4kW:DS-FRENCH,ENG,ETC
	CANADA CFCX-CFCF Montréal, Québec	0.5kW:DS
	CHINA (PR) GANSU PEOPLES BS Lanzhou	Irr::15kW:DS-CHINESE
	GERMANY (FR) R AMERICAN SECTOR Berlin	100kW:RIAS-1:EU
(con'd)	**JAPAN** NIPPON HOSO KYOKAI Fukuoka-Kasuga	Irr::0.6kW:USB:DS-1(FEEDER)

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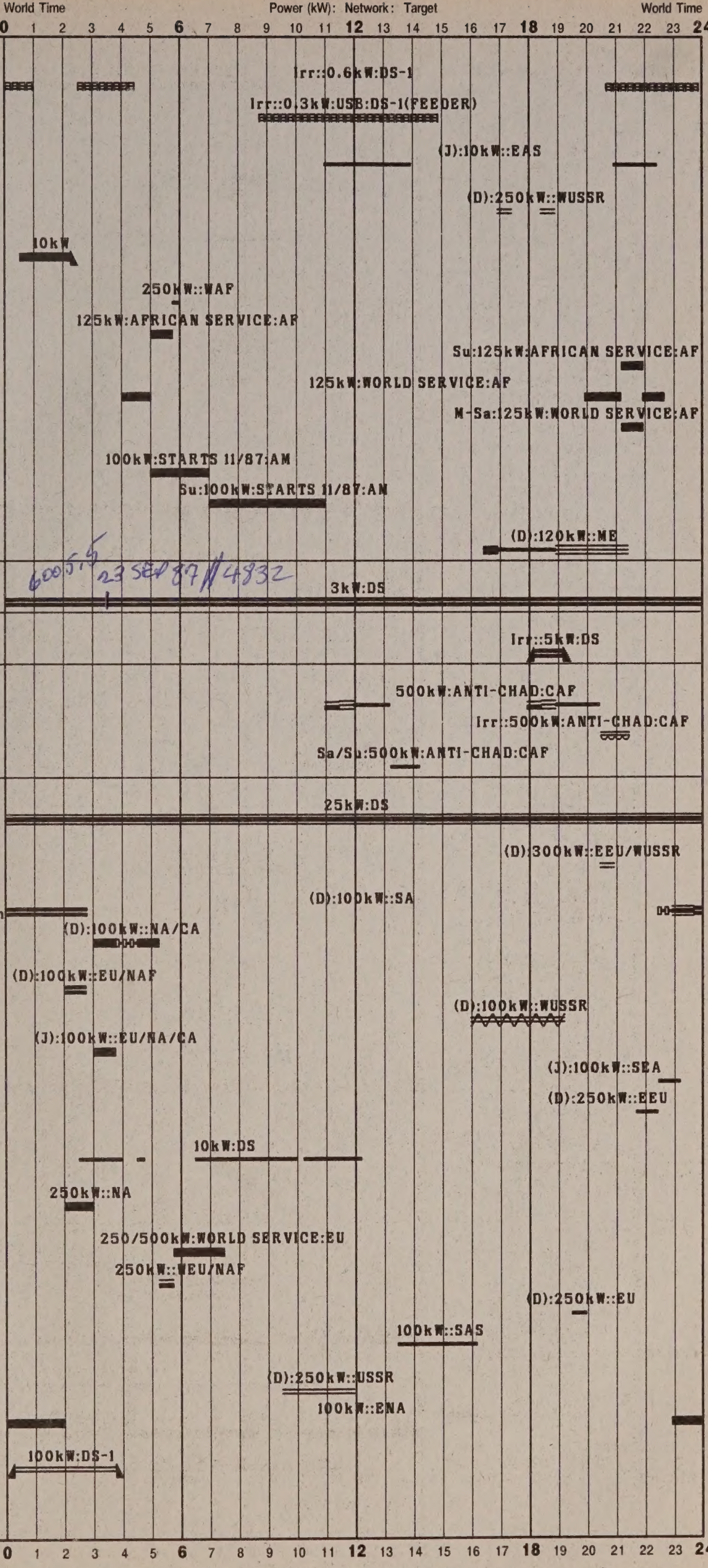
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6005 (con'd)	JAPAN NIPPON HOSO KYOKAI Matsuyama-Harita	Irr::0.6kW:DS-1
	NIPPON HOSO KYOKAI Nagoya-Nabeta	Irr::0.3kW:USB:DS-1(FEEDER)
	PHILIPPINES FAR EAST BC CO Bocaue	(J):10kW::EAS
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::WUSSR
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	10kW
	UNITED KINGDOM BBC Via Ascension	250kW::WAF 125kW:AFRICAN SERVICE:AF Su:125kW:AFRICAN SERVICE:AF 125kW:WORLD SERVICE:AF M-Sa:125kW:WORLD SERVICE:AF
	USA KUSW Salt Lake City,Utah	100kW:STARTS 11/87:AM Su:100kW:STARTS 11/87:AM
	USSR RADIO MOSCOW/RP&P Krasnodar	(D):120kW::ME
6006	COSTA RICA RADIO RELOJ San José	6005.5 23 SEP 87 // 4832 3kW:DS
6008v	MEXICO RADIO MIL México City	Irr::5kW:DS
6009	CLANDESTINE (AFRICA) "RADIO BARDAI" Sabrätah, Libya	500kW:ANTI-CHAD:CAF Irr::500kW:ANTI-CHAD:CAF Sa/Su:500kW:ANTI-CHAD:CAF
6010	BRAZIL R INCONFIDENCIA Belo Horizonte	25kW:DS
	CANADA RADIO CANADA INTL Via United Kingdom	(D):300kW::EEU/WUSSR
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	(D):100kW::SA (D):100kW::NA/CA
	GERMANY (FR) DEUTSCHE WELLE Jülich	(D):100kW::EU/NAF (D):100kW::WUSSR (J):100kW::EU/NA/CA (J):100kW::SEA
	DEUTSCHE WELLE Via Sines, Portugal	(D):250kW::EEU
	INDIA ALL INDIA RADIO Calcutta	10kW:DS
	SOUTH AFRICA RADIO RSA Meyerton	250kW::NA
	UNITED KINGDOM BBC Multiple Locations	250/500kW:WORLD SERVICE:EU
	BBC Skelton, Cumbria	250kW::WEU/NAF (D):250kW::EU
	BBC Via Maşirah, Oman	100kW::SAS
	USA KGEI-VO FRIENDSHIP Redwood City, Ca	(D):250kW::USSR
	WORLD HARVEST R Noblesville,Indiana	100kW::ENA
(con'd)	USSR RADIO MOSCOW Novosibirsk	100kW:DS-1



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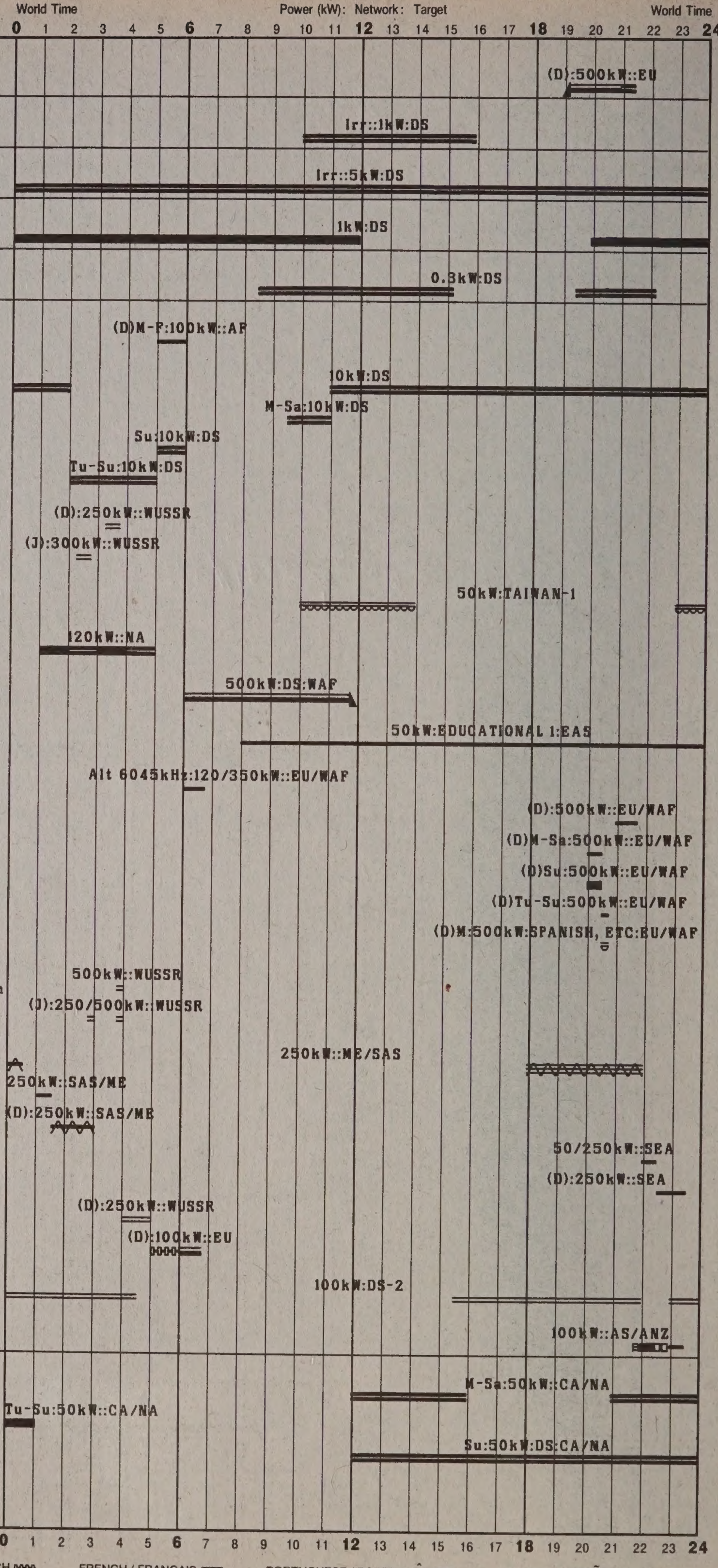
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6010 (con'd)	USSR RADIO MOSCOW/RP&P Nikolayev	(D):500kW::EU
6010v	VENEZUELA RADIO LOS ANDES Mérida	Irr::1kW:DS
6010.5	PERU RADIO AMERICA Lima	Irr::5kW:DS
6012	ANTARCTICA AFAN-US MILITARY McMurdo Base	1kW:DS
6014.6	PARAGUAY EMISORAS PARAGUAY Asunción	0.3kW:DS
6015	BELGIUM BELGISCHE RADIO TV Wavre	(D)M-F:100kW::AF
	BOLIVIA RADIO EL MUNDO Santa Cruz	10kW:DS M-Sa:10kW:DS Su:10kW:DS Tu-Su:10kW:DS
	CANADA RADIO CANADA INTL Via Sines, Portugal	(D):250kW::WUSSR
	RADIO CANADA INTL Via United Kingdom	(J):300kW::WUSSR
	CHINA (PR) CENTRAL PEOPLES BS Beijing	50kW:TAIWAN-1
	CZECHOSLOVAKIA RADIO PRAGUE Piešťany-Velké K'y	120kW::NA
	IVORY COAST RTV IVOIRIENNE Abidjan	500kW:DS:WAF
	KOREA (REPUBLIC) KOREAN BC SYSTEM Suwŏn	50kW:EDUCATIONAL 1:EAS
	NORWAY RADIO NORWAY INTL Fredrikstad	Alt 6045kHz:120/350kW::EU/WAF
	RADIO NORWAY INTL Kvitsøy	(D):500kW::EU/WAF (D)M-Sa:500kW::EU/WAF (D)Su:500kW::EU/WAF (D)Tu-Su:500kW::EU/WAF (D)M:500kW:SPANISH, ETC:EU/WAF
	UNITED KINGDOM BBC Holywell-Rampisham	500kW::WUSSR
	BBC Various Locations	(J):250/500kW::WUSSR
	USA VOICE OF AMERICA Via Kavála, Greece	250kW::ME/SAS 250kW::SAS/ME (D):250kW::SAS/ME
	VOICE OF AMERICA Via Philippines	50/250kW::SEA (D):250kW::SEA
	VOICE OF AMERICA Via Woofferton, UK	(D):250kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::EU
	USSR RADIO MOSCOW Minsk	100kW:DS-2
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::AS/ANZ
6015v	NICARAGUA LV DE NICARAGUA Managua	M-Sa:50kW::CA/NA Tu-Su:50kW::CA/NA
(con'd)		Su:50kW:DS:CA/NA



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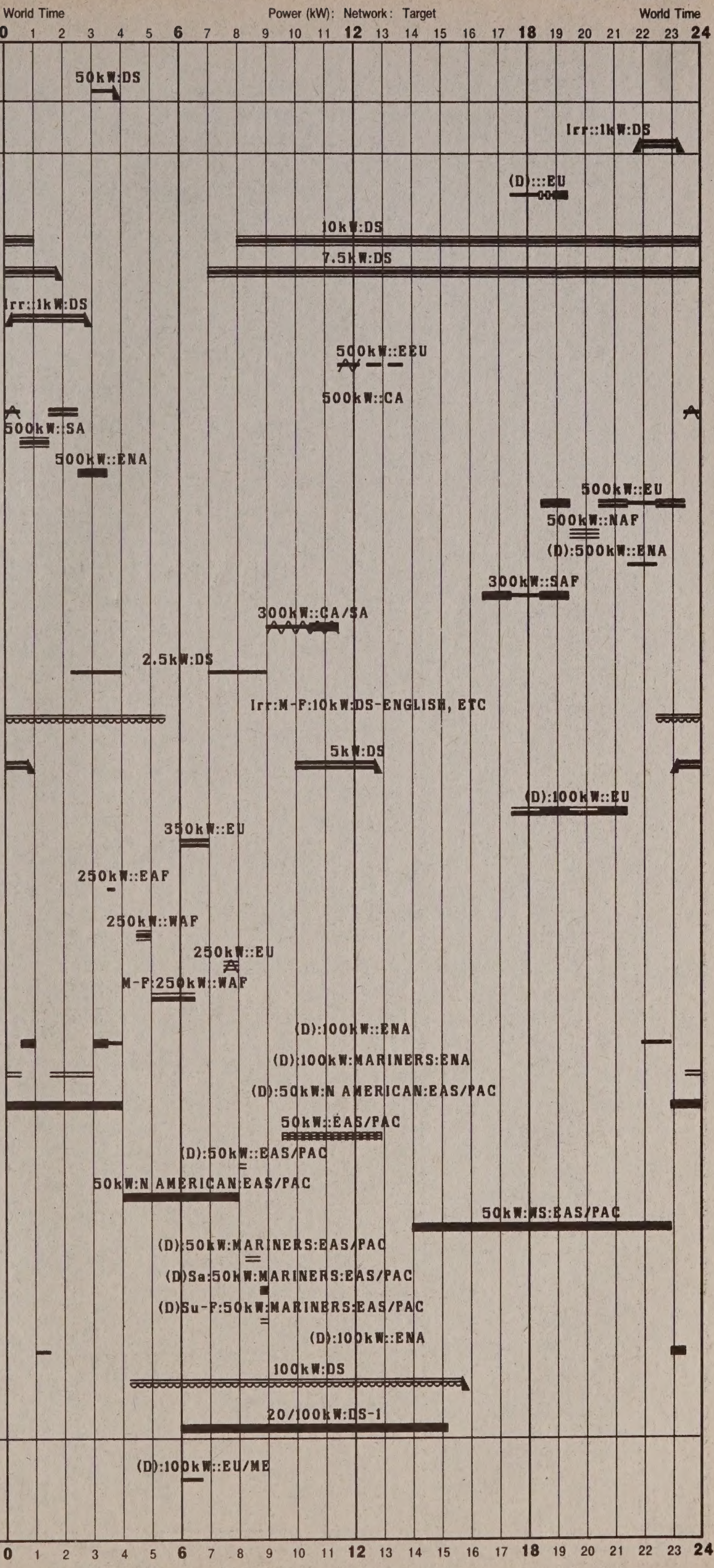

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6015v (con'd)	**TANZANIA**	
	RADIO TANZANIA Bububu, Zanzibar	50kW:DS
6016v	**DOMINICAN REPUBLIC**	
	RADIO SANTIAGO Santiago	Irr::1kW:DS
6020	**AFGHANISTAN**	
	RADIO AFGHANISTAN Via USSR	(D):::EU
	BRAZIL	
	R EDUCADORA BAHIA Salvador	10kW:DS
	RADIO GAUCHA Pôrto Alegre	7.5kW:DS
	CHILE	
	R DIEGO PORTALES Santiago	Irr::1kW:DS
	GERMANY (FR)	
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EEU
	HOLLAND	
	RADIO NEDERLAND Flevoland	500kW::CA 500kW::SA 500kW::ENA 500kW::EU 500kW::NAF (D):500kW::ENA
	RADIO NEDERLAND Via Madagascar	300kW::SAF
	RADIO NEDERLAND Via Neth Antilles	300kW::CA/SA
	INDIA	
	ALL INDIA RADIO Simla	2.5kW:DS
	PAPUA NEW GUINEA	
	R NORTH SOLOMONS Kieta	Irr:M-F:10kW:DS-ENGLISH, ETC
	PERU	
	RADIO VICTORIA Lima	5kW:DS
	SPAIN	
	R EXTERIOR ESPANA Arganda	(D):100kW::EU
	R EXTERIOR ESPANA Noblejas	350kW::EU
	UNITED KINGDOM	
	BBC Via Ascension	250kW::EAF
	USA	
	VOICE OF AMERICA Greenville, NC	250kW::WAF 250kW::EU M-F:250kW::WAF
	USSR	
	RADIO KIEV Kiev	(D):100kW::ENA
	RADIO MOSCOW Kiev	(D):100kW:MARINERS:ENA
	RADIO MOSCOW/RP&P Khabarovsk	(D):50kW:N AMERICAN:EAS/PAC 50kW::EAS/PAC (D):50kW::EAS/PAC 50kW:N AMERICAN:EAS/PAC 50kW:WS:EAS/PAC
	RADIO TIKHIY OKEAN Khabarovsk	(D):50kW:MARINERS:EAS/PAC (D)Sa:50kW:MARINERS:EAS/PAC (D)Su-F:50kW:MARINERS:EAS/PAC
	RADIO VILNIUS Kiev	(D):100kW::ENA
	UKRAINIAN RADIO Kiev	100kW:DS
	ZIMBABWE	
	ZIMBABWE BC CORP Gweru	20/100kW:DS-1
6025 (con'd)	**GERMANY (FR)**	
	DEUTSCHE WELLE Jülich	(D):100kW::EU/ME

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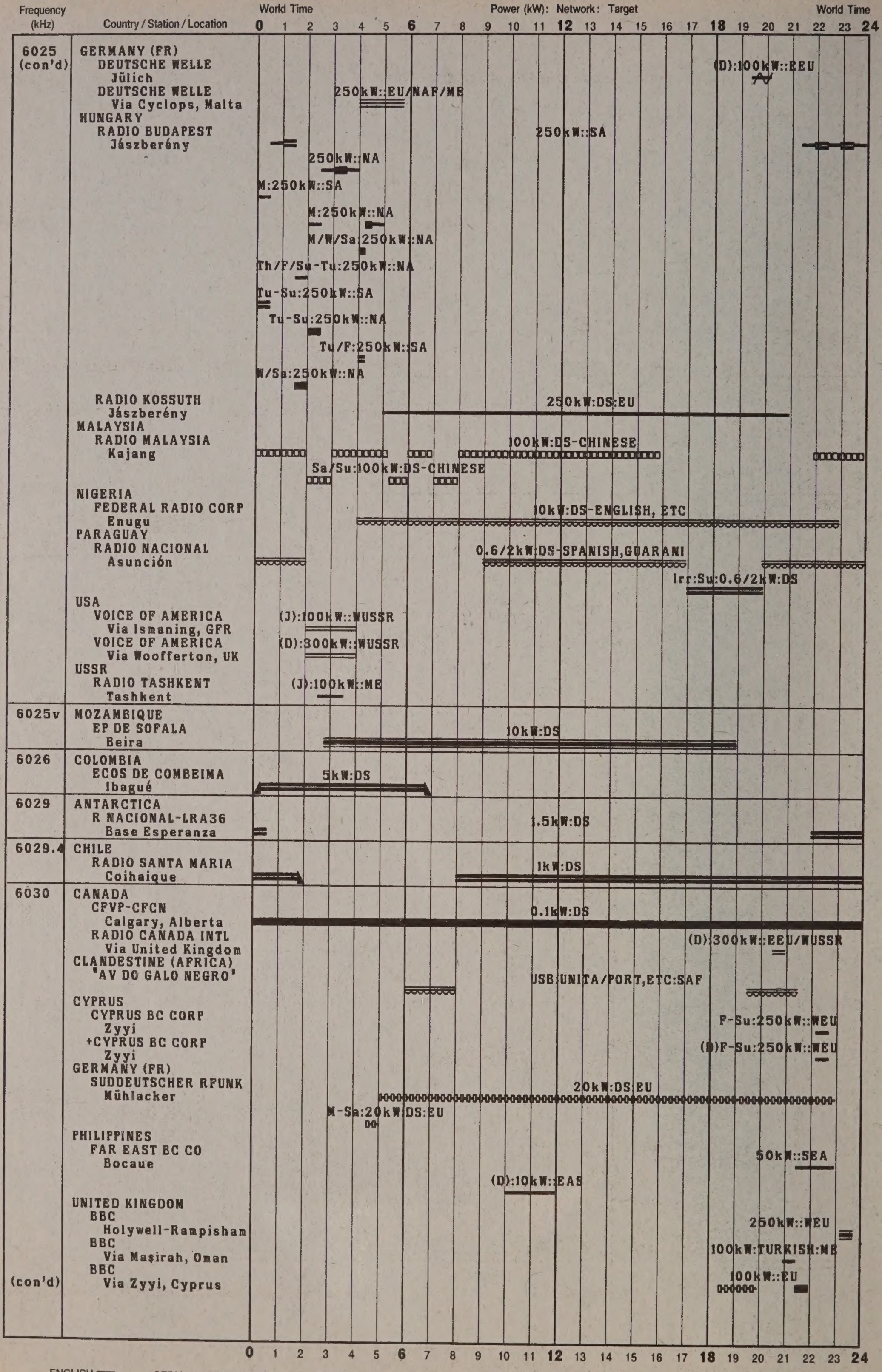

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6025 (con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich	(D):100kW::EEU
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::EU/NAF/ME
	HUNGARY RADIO BUDAPEST Jászberény	250kW::SA 250kW::NA M:250kW::SA M:250kW::NA M/W/Sa:250kW::NA Th/F/Su-Tu:250kW::NA Tu-Su:250kW::SA Tu-Su:250kW::NA Tu/F:250kW::SA W/Sa:250kW::NA
	RADIO KOSSUTH Jászberény	250kW:DS:EU
	MALAYSIA RADIO MALAYSIA Kajang	100kW:DS-CHINESE Sa/Su:100kW:DS-CHINESE
	NIGERIA FEDERAL RADIO CORP Enugu	10kW:DS-ENGLISH, ETC
	PARAGUAY RADIO NACIONAL Asunción	0.6/2kW:DS-SPANISH,GUARANI Irr:Su:0.6/2kW:DS
	USA VOICE OF AMERICA Via Ismaning, GFR	(J):100kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(D):300kW::WUSSR
	USSR RADIO TASHKENT Tashkent	(J):100kW::ME
6025v	MOZAMBIQUE EP DE SOFALA Beira	10kW:DS
6026	COLOMBIA ECOS DE COMBEIMA Ibagué	5kW:DS
6029	ANTARCTICA R NACIONAL-LRA36 Base Esperanza	1.5kW:DS
6029.4	CHILE RADIO SANTA MARIA Coihaique	1kW:DS
6030	CANADA CFVP-CFCN Calgary, Alberta	0.1kW:DS
	RADIO CANADA INTL Via United Kingdom	(D):300kW::EEU/WUSSR
	CLANDESTINE (AFRICA) "AV DO GALO NEGRO"	USB:UNITA/PORT,ETC:SAF
	CYPRUS CYPRUS BC CORP Zyyi	F-Su:250kW::WEU
	+CYPRUS BC CORP Zyyi	(D)F-Su:250kW::WEU
	GERMANY (FR) SUDDEUTSCHER RFUNK Mühlacker	20kW:DS:EU M-Sa:20kW:DS:EU
	PHILIPPINES FAR EAST BC CO Bocaue	50kW::SEA (D):10kW::EAS
	UNITED KINGDOM BBC Holywell-Rampisham	250kW::WEU
	BBC Via Maşirah, Oman	100kW:TURKISH:ME
(con'd)	BBC Via Zyyi, Cyprus	100kW::EU

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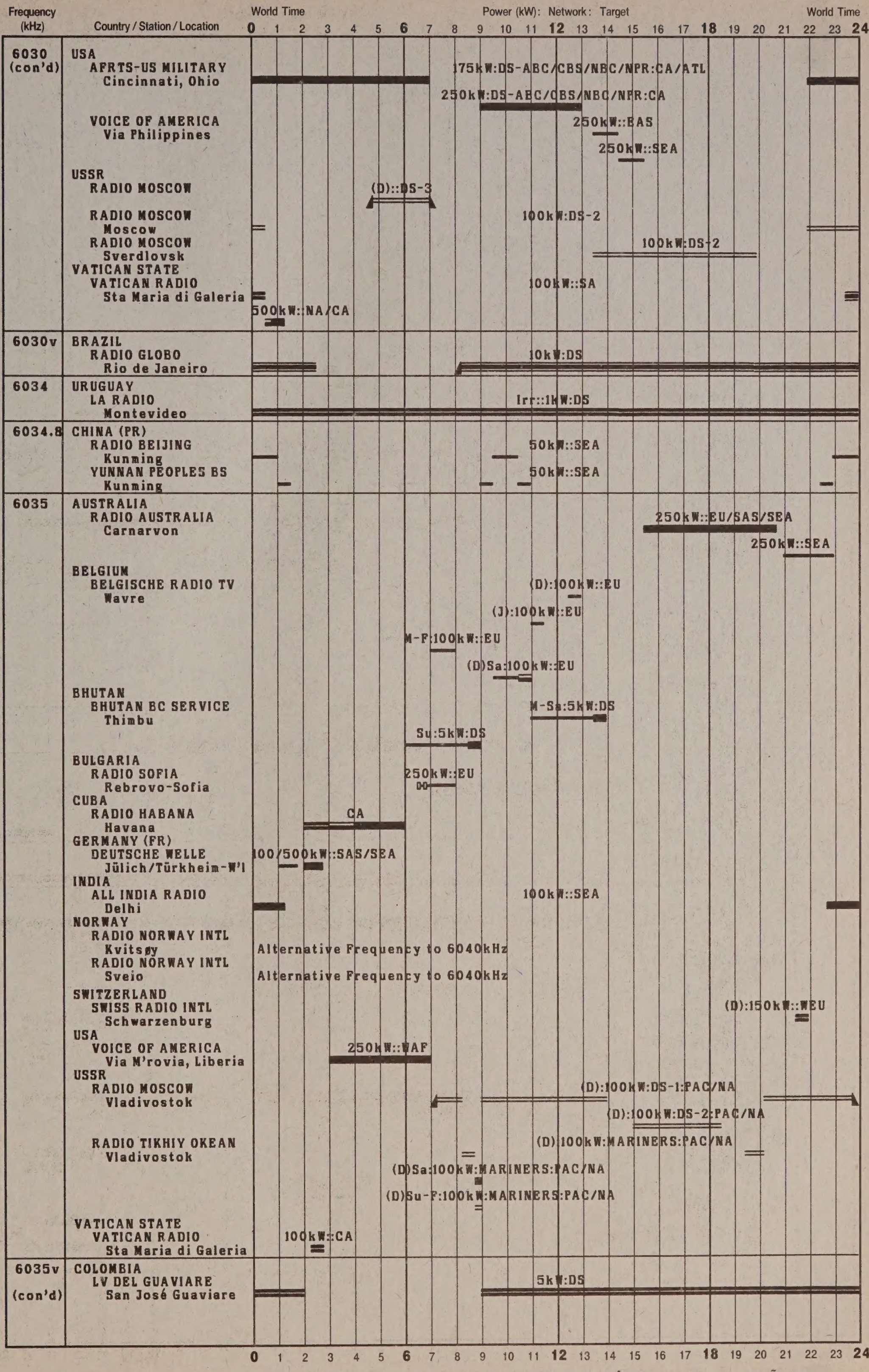

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6030 (con'd)	**USA** AFRTS-US MILITARY Cincinnati, Ohio	175kW:DS-ABC/CBS/NBC/NPR:CA/ATL 250kW:DS-ABC/CBS/NBC/NPR:CA
	VOICE OF AMERICA Via Philippines	250kW::EAS 250kW::SEA
	USSR RADIO MOSCOW	(D)::DS-3
	RADIO MOSCOW Moscow	100kW:DS-2
	RADIO MOSCOW Sverdlovsk	100kW:DS-2
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::SA 500kW::NA/CA
6030v	**BRAZIL** RADIO GLOBO Rio de Janeiro	10kW:DS
6034	**URUGUAY** LA RADIO Montevideo	Irr::1kW:DS
6034.8	**CHINA (PR)** RADIO BEIJING Kunming	50kW::SEA
	YUNNAN PEOPLES BS Kunming	50kW::SEA
6035	**AUSTRALIA** RADIO AUSTRALIA Carnarvon	250kW::EU/SAS/SEA 250kW::SEA
	BELGIUM BELGISCHE RADIO TV Wavre	(D):100kW::EU (J):100kW::EU M-F:100kW::EU (D)Sa:100kW::EU
	BHUTAN BHUTAN BC SERVICE Thimbu	M-Sa:5kW:DS Su:5kW:DS
	BULGARIA RADIO SOFIA Rebrovo-Sofia	250kW::EU
	CUBA RADIO HABANA Havana	CA
	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	100/500kW::SAS/SEA
	INDIA ALL INDIA RADIO Delhi	100kW::SEA
	NORWAY RADIO NORWAY INTL Kvitsøy	Alternative Frequency to 6040kHz
	RADIO NORWAY INTL Sveio	Alternative Frequency to 6040kHz
	SWITZERLAND SWISS RADIO INTL Schwarzenburg	(D):150kW::WEU
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF
	USSR RADIO MOSCOW Vladivostok	(D):100kW:DS-1:PAC/NA (D):100kW:DS-2:PAC/NA
	RADIO TIKHIY OKEAN Vladivostok	(D):100kW:MARINERS:PAC/NA (D)Sa:100kW:MARINERS:PAC/NA (D)Su-F:100kW:MARINERS:PAC/NA
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::CA
6035v (con'd)	**COLOMBIA** LV DEL GUAVIARE San José Guaviare	5kW:DS

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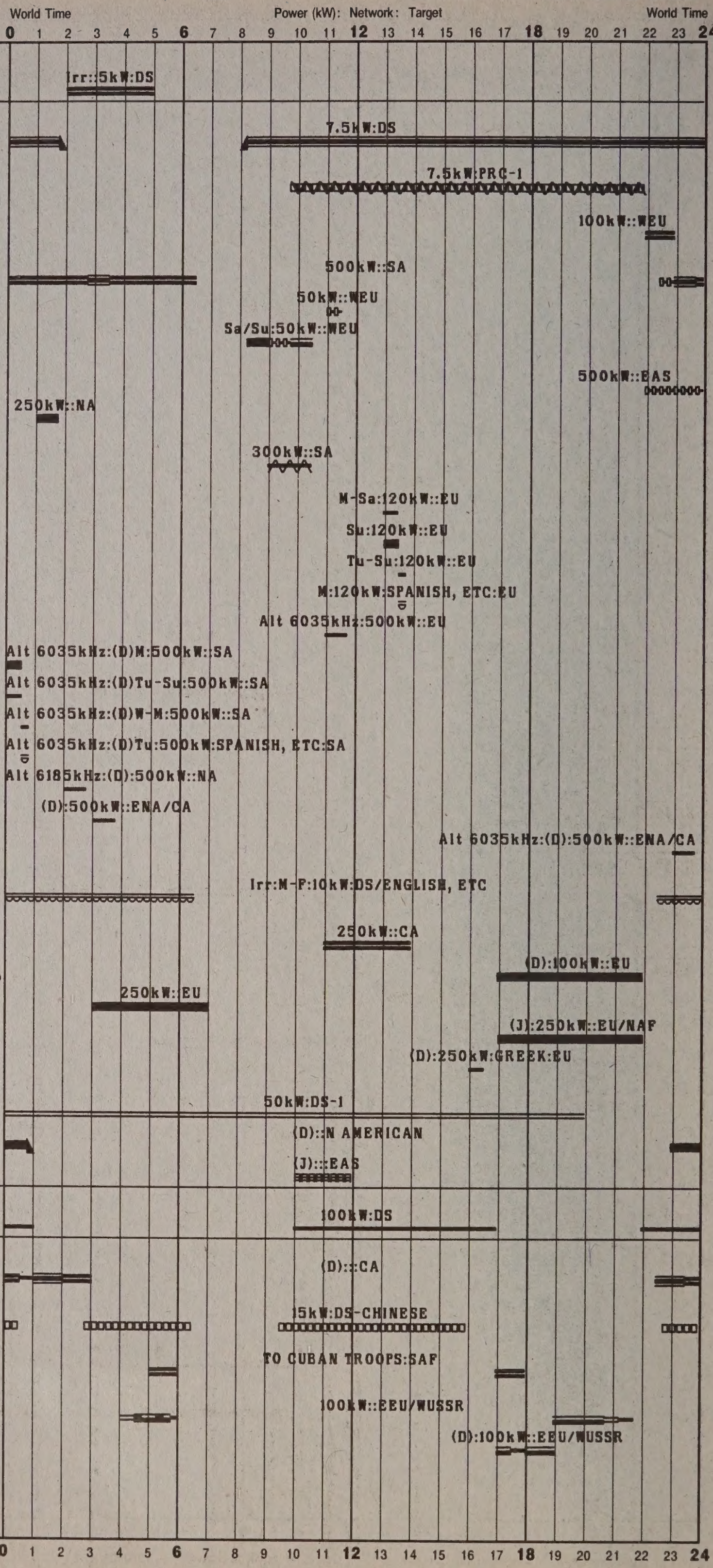
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6035v (con'd)	COLOMBIA LV DEL GUAVIARE San José Guaviare	Irr::5kW:DS
6040	BRAZIL R CLUBE PARANAENSE Curitiba	7.5kW:DS
	CHINA (TAIWAN) CENTRAL BC SYSTEM T'ai-pei	7.5kW:PRC-1
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::WEU
	GERMANY (DR) RADIO BERLIN INTL Nauen	500kW::SA 50kW::WEU Sa/Su:50kW::WEU
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EAS
	DEUTSCHE WELLE Via Antigua	250kW::NA
	HOLLAND RADIO NEDERLAND Via Neth Antilles	300kW::SA
	NORWAY RADIO NORWAY INTL Fredrikstad	M-Sa:120kW::EU Su:120kW::EU Tu-Su:120kW::EU M:120kW:SPANISH, ETC:EU
	RADIO NORWAY INTL Kvitsøy	Alt 6035kHz:500kW::EU Alt 6035kHz:(D)M:500kW::SA Alt 6035kHz:(D)Tu-Su:500kW::SA Alt 6035kHz:(D)W-M:500kW::SA Alt 6035kHz:(D)Tu:500kW:SPANISH, ETC:SA
	RADIO NORWAY INTL Sveio	Alt 6185kHz:(D):500kW::NA (D):500kW::ENA/CA Alt 6035kHz:(D):500kW::ENA/CA
	PAPUA NEW GUINEA RADIO MILNE BAY Alotau	Irr:M-F:10kW:DS/ENGLISH, ETC
	USA VOICE OF AMERICA Dixon, California	250kW::CA
	VOICE OF AMERICA Via Tangier,Morocco	(D):100kW::EU
	VOICE OF AMERICA Via Woofferton, UK	250kW::EU (J):250kW::EU/NAF (D):250kW:GREEK:EU
	USSR RADIO MOSCOW Ashkhabad	50kW:DS-1
	RADIO MOSCOW/RP&P	(D)::N AMERICAN (J):::EAS
6044.8	INDONESIA R REP INDONESIA Jakarta, Jawa	100kW:DS
6045	BULGARIA RADIO SOFIA	(D)::CA
	CHINA (PR) NEI MONGGOL PBS Hohhot	15kW:DS-CHINESE
	CLANDESTINE (AFRICA) "CUBANS IN AFRICA" Pietersburg, S Af	TO CUBAN TROOPS:SAF
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EEU/WUSSR (D):100kW::EEU/WUSSR
(con'd)		



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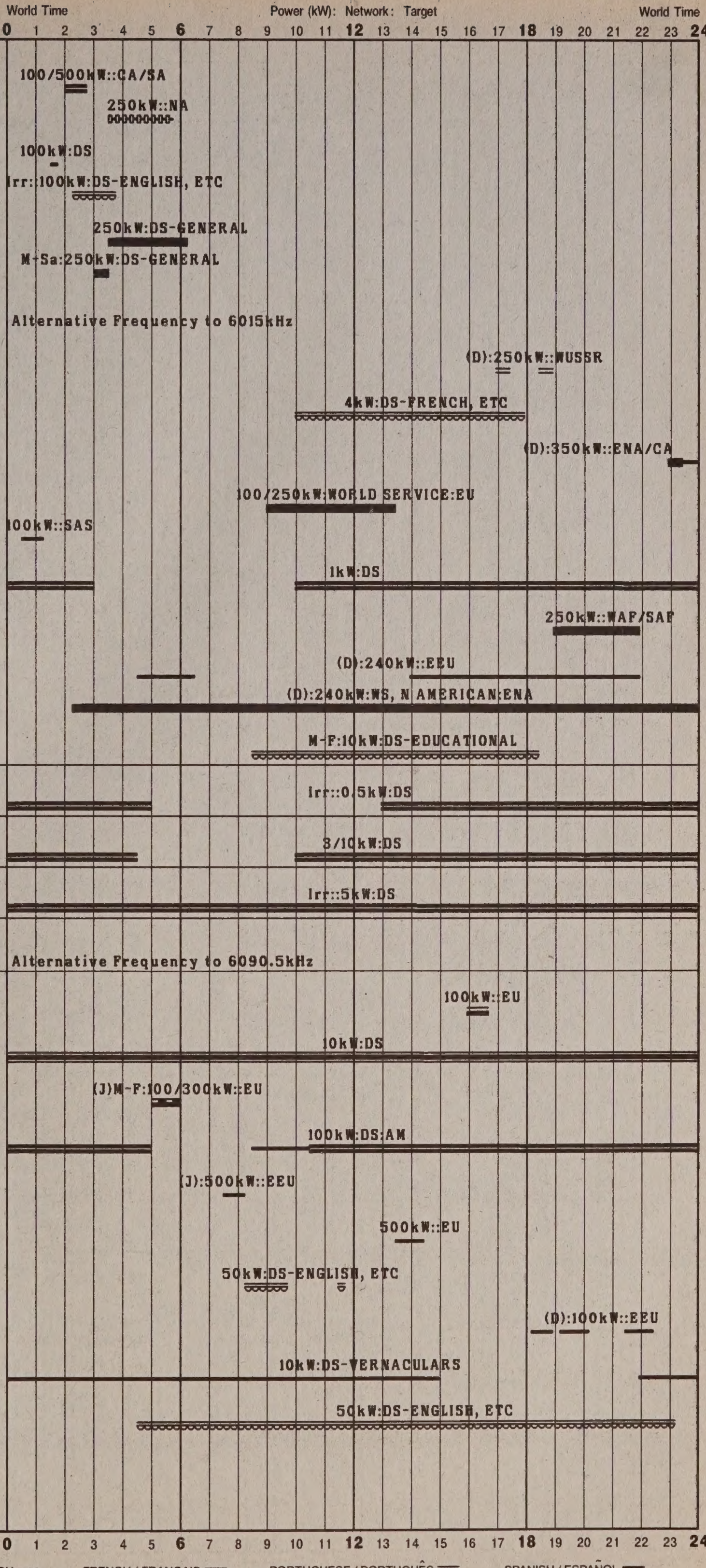

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6045 (con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	100/500kW::CA/SA
	DEUTSCHE WELLE Via Sackville, Can	250kW::NA
	INDIA ALL INDIA RADIO Delhi	100kW:DS Irr::100kW:DS-ENGLISH, ETC
	KENYA VOICE OF KENYA Nairobi	250kW:DS-GENERAL M-Sa:250kW:DS-GENERAL
	NORWAY RADIO NORWAY INTL Fredrikstad	Alternative Frequency to 6015kHz
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::WUSSR
	SENEGAL ORT DU SENEGAL Tambacounda	4kW:DS-FRENCH, ETC
	SWEDEN RADIO SWEDEN INTL Hörby	(D):350kW::ENA/CA
	UNITED KINGDOM BBC Skelton, Cumbria	100/250kW:WORLD SERVICE:EU
	BBC Via Maşirah, Oman	100kW::SAS
	URUGUAY RADIO SPORT Montevideo	1kW:DS
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/SAF
	USSR RADIO MOSCOW/RP&P Moscow	(D):240kW::EEU
	RADIO MOSCOW/RP&P Simferopol'	(D):240kW:WS, N AMERICAN:ENA
	ZIMBABWE ZIMBABWE BC CORP Gweru	M-F:10kW:DS-EDUCATIONAL
6045v	MEXICO RADIO UNIVERSIDAD San Luis Potosí	Irr::0.5kW:DS
6045.5	PERU RADIO SANTA ROSA Lima	3/10kW:DS
6045.6	COLOMBIA RADIO MELODIA Bogotá	Irr::5kW:DS
6049.2	GUATEMALA UNION RADIO-AWR Guatemala City	Alternative Frequency to 6090.5kHz
6050	BELGIUM RT BELGE FRANCAISE Wavre	100kW::EU
	BRAZIL RADIO GUARANI Belo Horizonte	10kW:DS
	CANADA RADIO CANADA INTL Via United Kingdom	(J)M-F:100/300kW::EU
	ECUADOR HCJB-VO THE ANDES Quito	100kW:DS:AM
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::EEU
	HOLLAND RADIO NEDERLAND Flevoland	500kW::EU
	INDIA ALL INDIA RADIO Delhi	50kW:DS-ENGLISH, ETC
	ITALY RTV ITALIANA Rome	(D):100kW::EEU
	MALAYSIA RTM-SARAWAK Sibu	10kW:DS-VERNACULARS
(con'd)	NIGERIA FEDERAL RADIO CORP Ibadan	50kW:DS-ENGLISH, ETC

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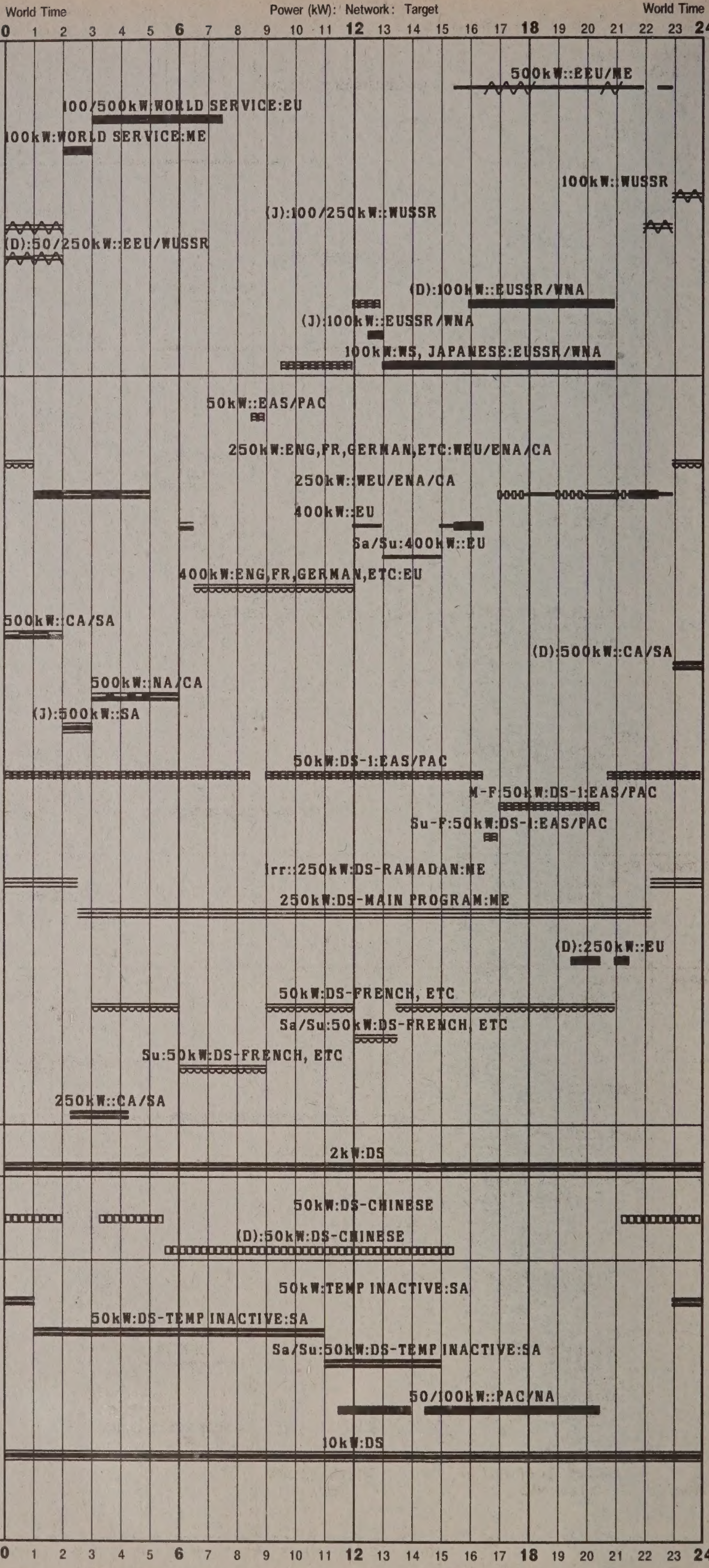

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6050 (con'd)	**UNITED KINGDOM**	
	BBC Holywell-Rampisham	500kW::EEU/ME
	BBC Multiple Locations	100/500kW:WORLD SERVICE:EU
	BBC Via Zyyi, Cyprus	100kW:WORLD SERVICE:ME
	USA	
	RFE-RL Via Germany (FR)	100kW::WUSSR (J):100/250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU/WUSSR
	USSR	
	RADIO MOSCOW/RP&P Khabarovsk	(D):100kW::EUSSR/WNA (J):100kW::EUSSR/WNA 100kW:WS, JAPANESE:EUSSR/WNA
6055	**CANADA**	
	RADIO CANADA INTL Via Tōkyō, Japan	50kW::EAS/PAC
	CZECHOSLOVAKIA	
	RADIO PRAGUE Pieštány-Velké K'y	250kW:ENG,FR,GERMAN,ETC:WEU/ENA/CA 250kW::WEU/ENA/CA
	RADIO PRAGUE Prague	400kW::EU Sa/Su:400kW::EU 400kW:ENG,FR,GERMAN,ETC:EU
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	500kW::CA/SA (D):500kW::CA/SA
	RADIO FRANCE INTL Via French Guiana	500kW::NA/CA (J):500kW::SA
	JAPAN	
	NIHON SHORTWAVE BC Tōkyō-Nagara	50kW:DS-1:EAS/PAC M-F:50kW:DS-1:EAS/PAC Su-F:50kW:DS-1:EAS/PAC
	KUWAIT	
	RADIO KUWAIT Jadādiyah	Irr::250kW:DS-RAMADAN:ME 250kW:DS-MAIN PROGRAM:ME
	ROMANIA	
	RADIO BUCHAREST Bucharest	(D):250kW::EU
	RWANDA	
	R REP RWANDAISE Kigali	50kW:DS-FRENCH, ETC Sa/Su:50kW:DS-FRENCH, ETC Su:50kW:DS-FRENCH, ETC
	UNITED KINGDOM	
	BBC Via Delano, USA	250kW::CA/SA
6055.3	**PERU**	
	RADIO CONTINENTAL Arequipa	2kW:DS
6058v	**CHINA (PR)**	
	SICHUAN PEOPLES BS Xichang	50kW:DS-CHINESE (D):50kW:DS-CHINESE
6060	**ARGENTINA**	
	R ARGENTINA-RAE Buenos Aires	50kW:TEMP INACTIVE:SA
	RADIO NACIONAL Buenos Aires	50kW:DS-TEMP INACTIVE:SA Sa/Su:50kW:DS-TEMP INACTIVE:SA
	AUSTRALIA	
	RADIO AUSTRALIA Shepparton	50/100kW::PAC/NA
	BRAZIL	
(con'd)	RADIO UNIVERSO Curitiba	10kW:DS

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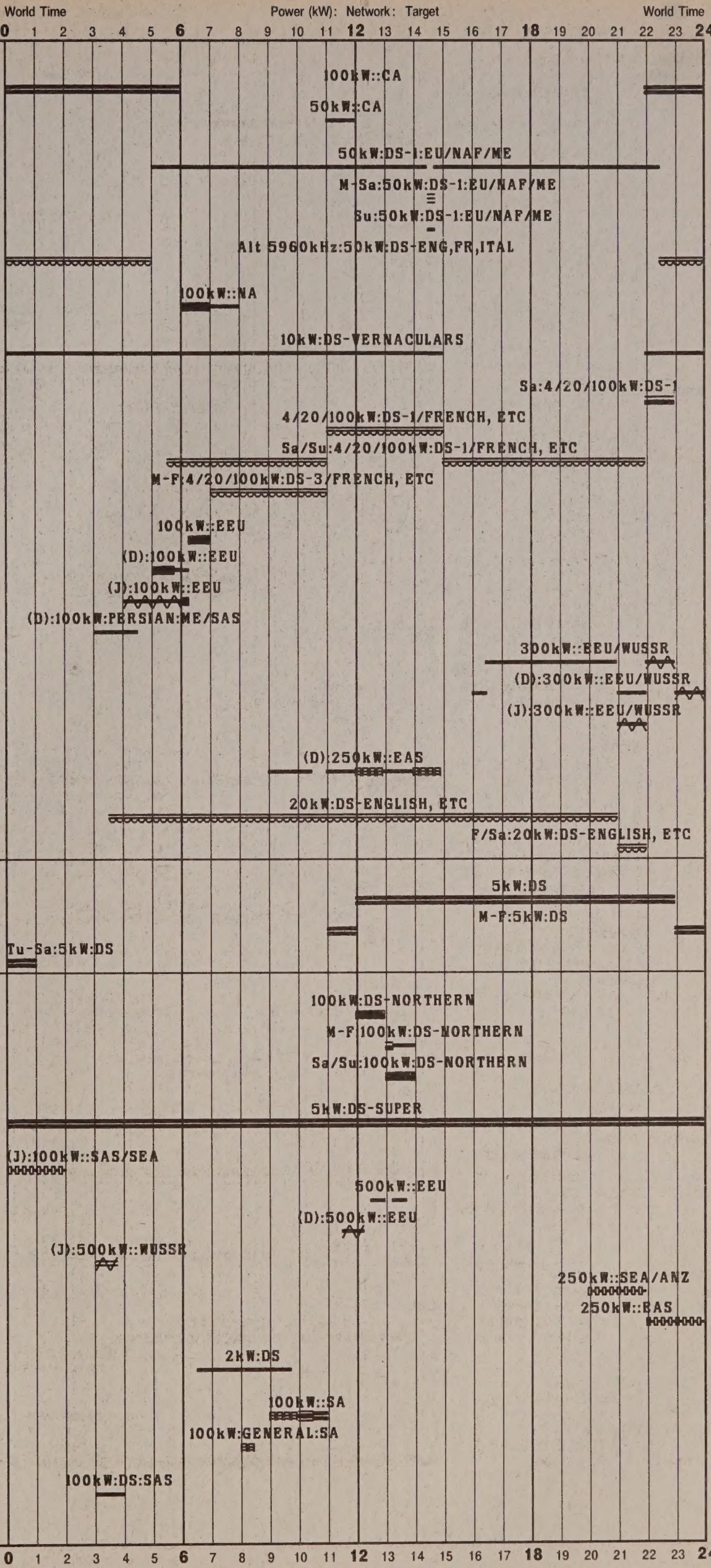
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6060 (con'd)	CUBA RADIO HABANA Havana	100kW::CA 50kW::CA
	ITALY RTV ITALIANA Caltanissetta	50kW:DS-1:EU/NAF/ME M-Sa:50kW:DS-1:EU/NAF/ME Su:50kW:DS-1:EU/NAF/ME
	RTV ITALIANA Rome	Alt 5960kHz:50kW:DS-ENG,FR,ITAL
	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	100kW::NA
	MALAYSIA RTM-SARAWAK Miri	10kW:DS-VERNACULARS
	NIGER LA VOIX DU SAHEL Niamey	Sa:4/20/100kW:DS-1 4/20/100kW:DS-1/FRENCH, ETC Sa/Su:4/20/100kW:DS-1/FRENCH, ETC M-F:4/20/100kW:DS-3/FRENCH, ETC
	USA VOICE OF AMERICA Via Ismaning, GFR	100kW::EEU (D):100kW::EEU (J):100kW::EEU
	VOICE OF AMERICA Via Kavála, Greece	(D):100kW:PERSIAN:ME/SAS
	VOICE OF AMERICA Via Woofferton, UK	300kW::EEU/WUSSR (D):300kW::EEU/WUSSR (J):300kW::EEU/WUSSR
	USSR RADIO MOSCOW/RP&P Chita	(D):250kW::EAS
	ZAMBIA RADIO ZAMBIA-ZBS Lusaka	20kW:DS-ENGLISH, ETC F/Sa:20kW:DS-ENGLISH, ETC
6061v	PERU RADIO JSV Huánuco	5kW:DS M-F:5kW:DS Tu-Sa:5kW:DS
6065	CANADA CANADIAN BC CORP Sackville, NB	100kW:DS-NORTHERN M-F:100kW:DS-NORTHERN Sa/Su:100kW:DS-NORTHERN
	COLOMBIA RADIO SUPER Bogotá	5kW:DS-SUPER
	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::SAS/SEA
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EEU (D):500kW::EEU (J):500kW::WUSSR
	DEUTSCHE WELLE Via Sri Lanka	250kW::SEA/ANZ 250kW::EAS
	INDIA ALL INDIA RADIO Kohima	2kW:DS
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::SA 100kW:GENERAL:SA
(con'd)	PAKISTAN PAKISTAN BC CORP Islamabad	100kW:DS:SAS



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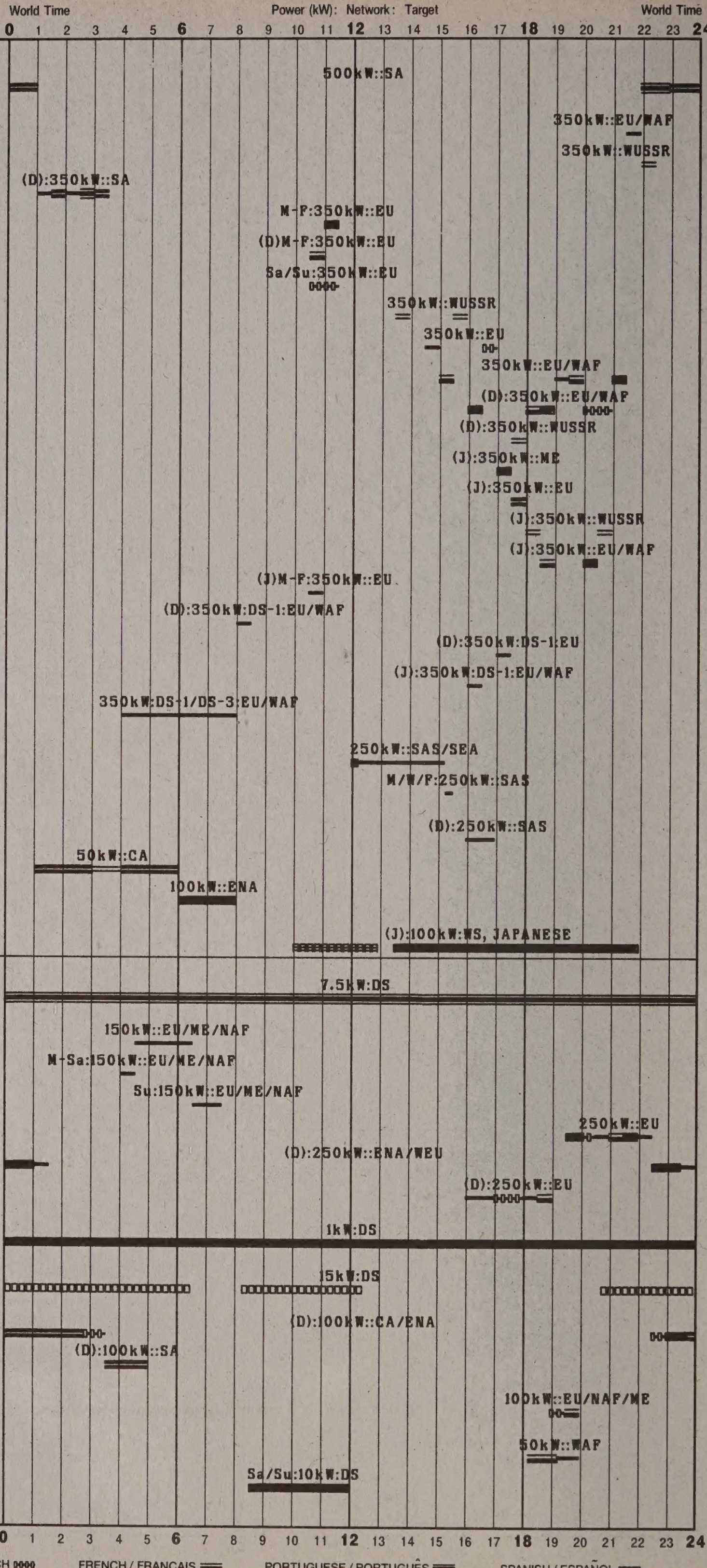

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6065 (con'd)	**SOUTH AFRICA** RADIO RSA Meyerton	500kW::SA
	SWEDEN RADIO SWEDEN INTL Hörby	350kW::EU/WAF 350kW::WUSSR (D):350kW::SA M-F:350kW::EU (D)M-F:350kW::EU Sa/Su:350kW::EU
	RADIO SWEDEN INTL Karlsborg	350kW::WUSSR 350kW::EU 350kW::EU/WAF (D):350kW::EU/WAF (D):350kW::WUSSR (J):350kW::ME (J):350kW::EU (J):350kW::WUSSR (J):350kW::EU/WAF
	SVERIGES RIKSRADIO Hörby	(J)M-F:350kW::EU
	SVERIGES RIKSRADIO Karlsborg	(D):350kW:DS-1:EU/WAF (D):350kW:DS-1:EU (J):350kW:DS-1:EU/WAF 350kW:DS-1/DS-3:EU/WAF
	UNITED KINGDOM BBC Via Singapore	250kW::SAS/SEA M/W/F:250kW::SAS
	USA VOICE OF AMERICA Via Philippines	(D):250kW::SAS
	WYFR-FAMILY RADIO Okeechobee,Florida	50kW::CA 100kW::ENA
	USSR RADIO MOSCOW/RP&P Petropavlovsk-Kam	(J):100kW:WS, JAPANESE
6070	**BRAZIL** RADIO CAPITAL Rio de Janeiro	7.5kW:DS
	BULGARIA RADIO SOFIA Elin Pelin-Stolnik	150kW::EU/ME/NAF M-Sa:150kW::EU/ME/NAF Su:150kW::EU/ME/NAF
	RADIO SOFIA Rebrovo-Sofia	250kW::EU (D):250kW::ENA/WEU (D):250kW::EU
	CANADA CFRX-CFRB Toronto, Ontario	1kW:DS
	CHINA (PR) JILIN PEOPLES BS Changchun	15kW:DS
	GERMANY (DR) RADIO BERLIN INTL Leipzig	(D):100kW::CA/ENA
	RADIO BERLIN INTL Nauen	(D):100kW::SA
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::EU/NAF/ME
	LIBERIA RADIO ELWA Monrovia	50kW::WAF Sa/Su:10kW:DS
(con'd)		

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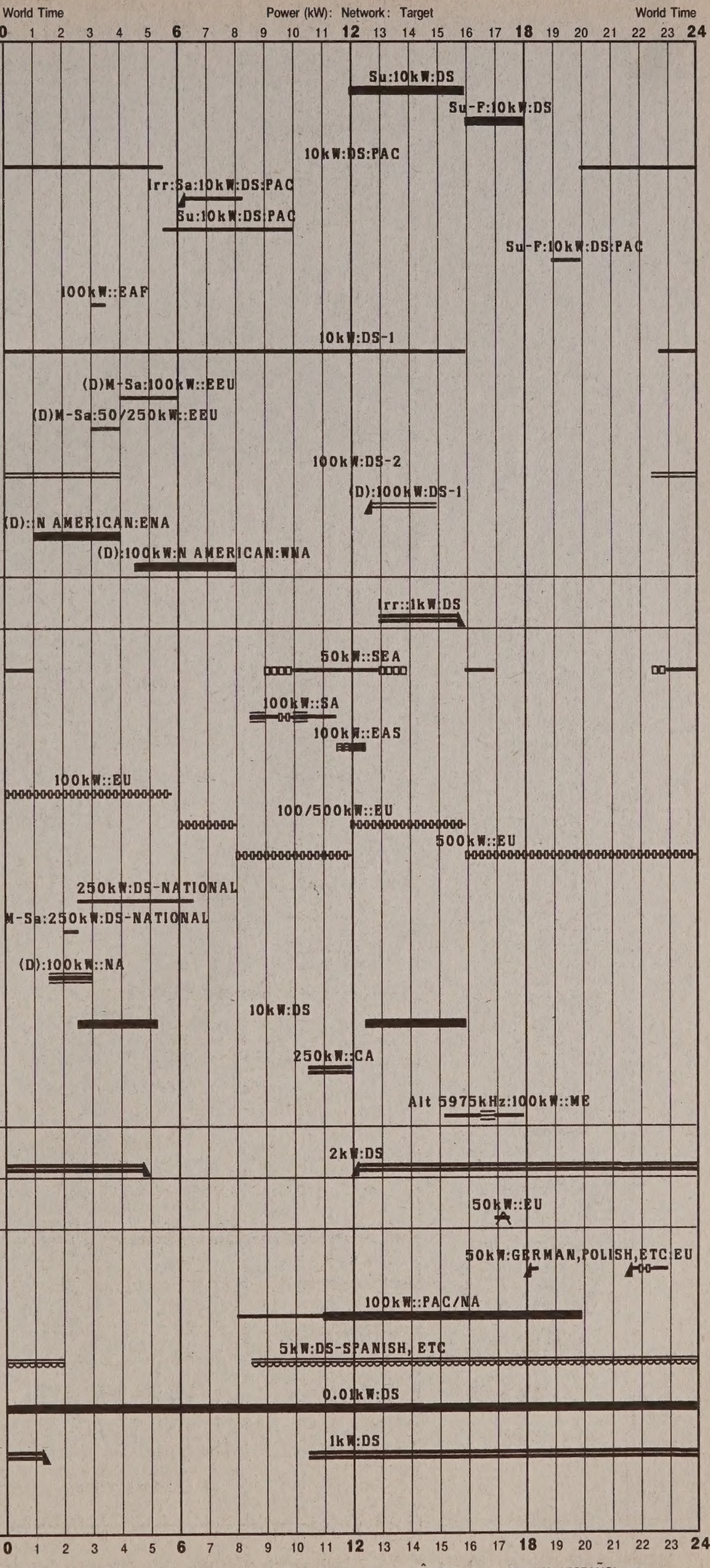
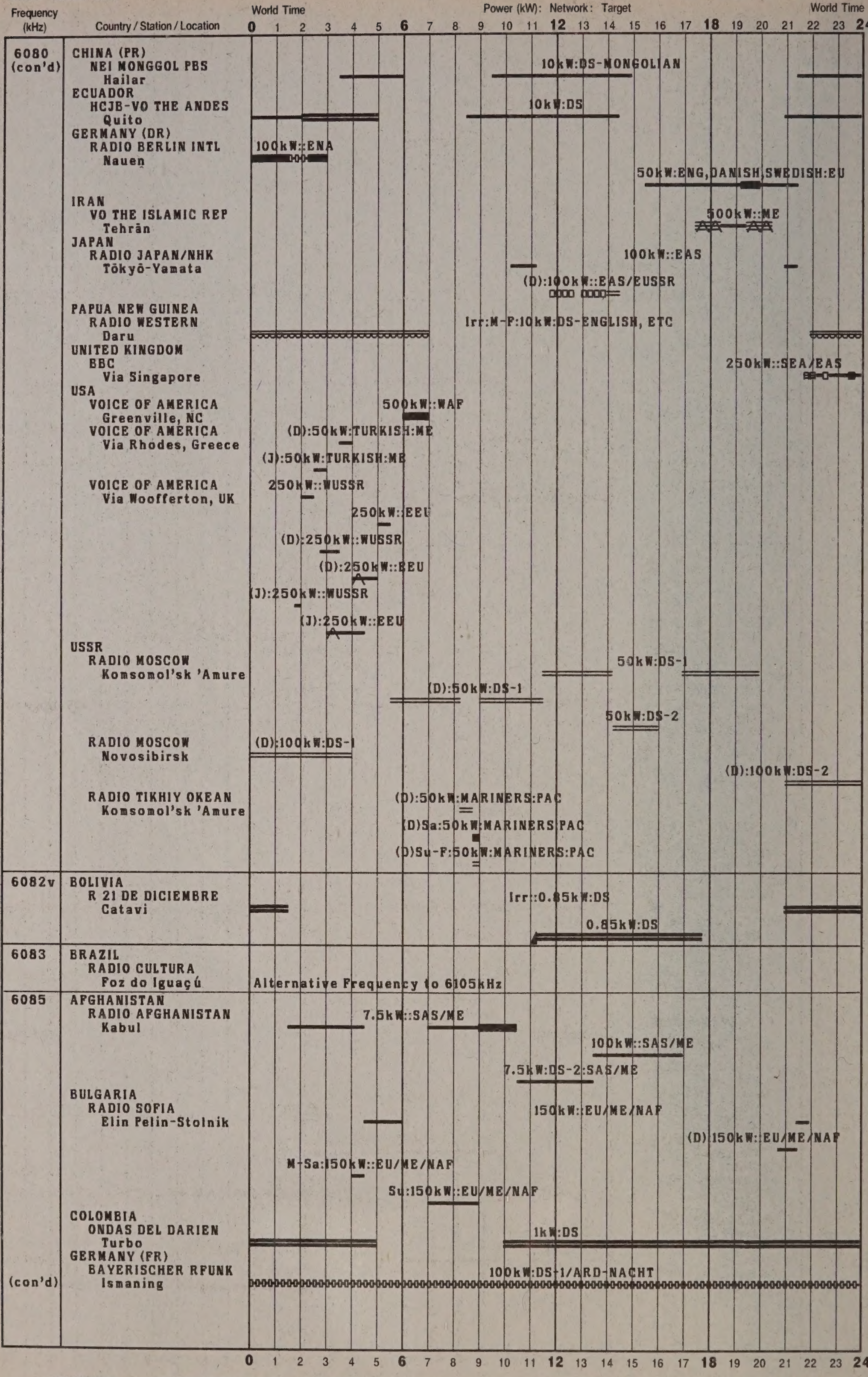
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6070 (con'd)	LIBERIA RADIO ELWA Monrovia	Su:10kW:DS Su-F:10kW:DS
	MARSHALL ISLANDS WSZO-R MARSHALLS Majuro	10kW:DS:PAC Irr:Sa:10kW:DS:PAC Su:10kW:DS:PAC Su-F:10kW:DS:PAC
	SWAZILAND TRANS WORLD RADIO Manzini	100kW::EAF
	THAILAND RADIO THAILAND Pathum Thani	10kW:DS-1
	USA RFE-RL Via Germany (FR)	(D)M-Sa:100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D)M-Sa:50/250kW::EEU
	USSR RADIO MOSCOW Khar'kov	100kW:DS-2
	RADIO MOSCOW Novosibirsk	(D):100kW:DS-1
	RADIO MOSCOW/RP&P	(D)::N AMERICAN:ENA
	RADIO MOSCOW/RP&P Khabarovsk	(D):100kW:N AMERICAN:WNA
6072v	COSTA RICA RADIO RUMBO Cartago	Irr::1kW:DS
6075	CHINA (PR) RADIO BEIJING Kunming	50kW::SEA
	ECUADOR HCJB-VO THE ANDES Quito	100kW::SA 100kW::EAS
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::EU
	DEUTSCHE WELLE Jülich/Türkheim-W'l	100/500kW::EU
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EU
	KENYA VOICE OF KENYA Nairobi	250kW:DS-NATIONAL M-Sa:250kW:DS-NATIONAL
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	(D):100kW::NA
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	10kW:DS
	USA RADIO MARTI Greenville, NC	250kW::CA
	USSR RADIO TASHKENT Tashkent	Alt 5975kHz:100kW::ME
6075.7	HONDURAS LA VOZ DEL JUNCO Santa Barbara	2kW:DS
6076v	ALBANIA RADIO TIRANA Krujë	50kW::EU
6080	ALBANIA RADIO TIRANA Lushnjë	50kW:GERMAN,POLISH,ETC:EU
	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC/NA
	BOLIVIA RADIO SAN GABRIEL La Paz	5kW:DS-SPANISH, ETC
	CANADA CKFX-CKWX Vancouver, BC	0.01kW:DS
(con'd)	CHILE PATAGONIA CHILENA Coihaique	1kW:DS



ENGLISH ▬ GERMAN / DEUTSCH ○○○ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 □□□ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



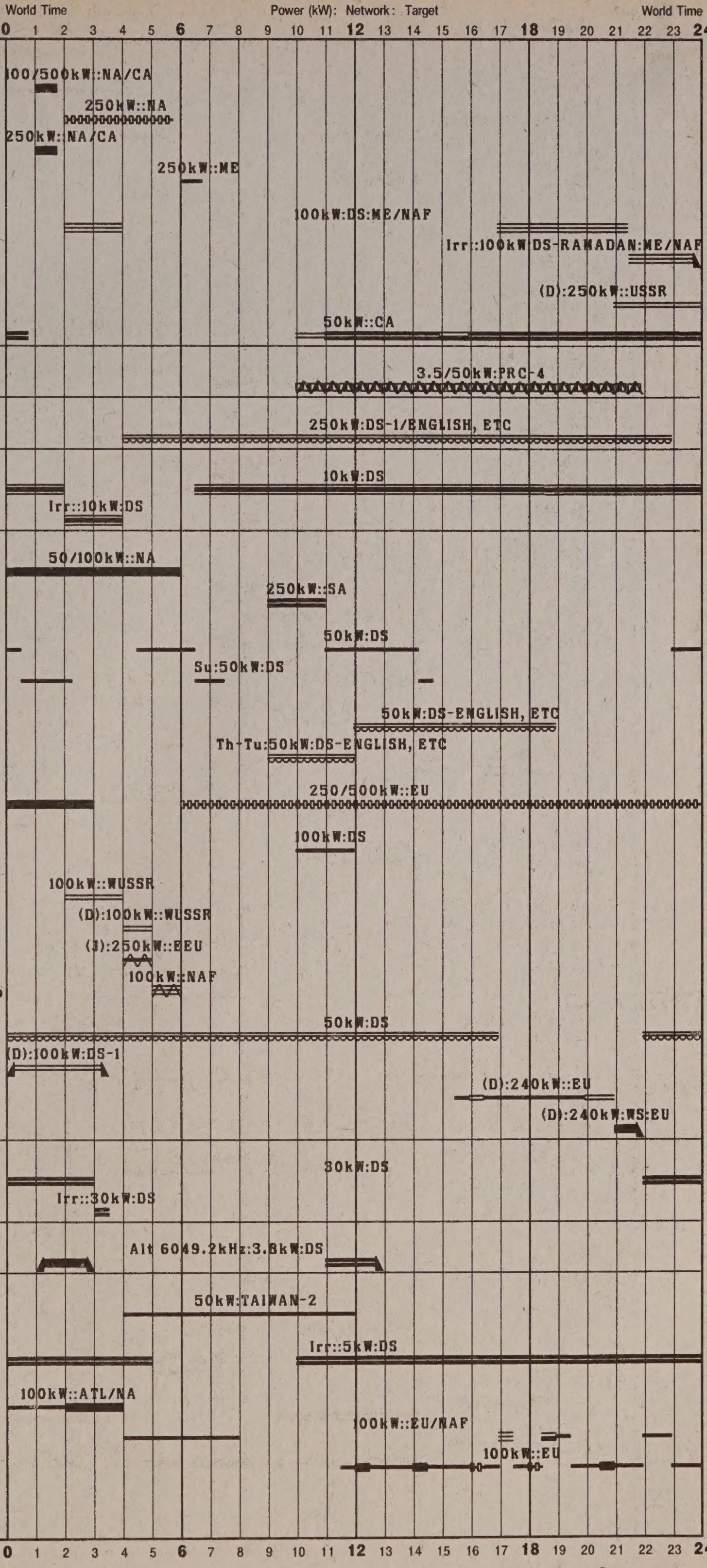
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6080 (con'd)	CHINA (PR) NEI MONGGOL PBS Hailar	10kW:DS-MONGOLIAN
	ECUADOR HCJB-VO THE ANDES Quito	10kW:DS
	GERMANY (DR) RADIO BERLIN INTL Nauen	100kW::ENA 50kW:ENG,DANISH,SWEDISH:EU
	IRAN VO THE ISLAMIC REP Tehrān	500kW::ME
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::EAS (D):100kW::EAS/EUSSR
	PAPUA NEW GUINEA RADIO WESTERN Daru	Irr:M-F:10kW:DS-ENGLISH, ETC
	UNITED KINGDOM BBC Via Singapore	250kW::SEA/EAS
	USA VOICE OF AMERICA Greenville, NC	500kW::WAF
	VOICE OF AMERICA Via Rhodes, Greece	(D):50kW:TURKISH:ME (J):50kW:TURKISH:ME
	VOICE OF AMERICA Via Woofferton, UK	250kW::WUSSR 250kW::EEU (D):250kW::WUSSR (D):250kW::EEU (J):250kW::WUSSR (J):250kW::EEU
	USSR RADIO MOSCOW Komsomol'sk 'Amure	50kW:DS-1 (D):50kW:DS-1 50kW:DS-2
	RADIO MOSCOW Novosibirsk	(D):100kW:DS-1 (D):100kW:DS-2
	RADIO TIKHIY OKEAN Komsomol'sk 'Amure	(D):50kW:MARINERS:PAC (D)Sa:50kW:MARINERS:PAC (D)Su-F:50kW:MARINERS:PAC
6082v	BOLIVIA R 21 DE DICIEMBRE Catavi	Irr::0.85kW:DS 0.85kW:DS
6083	BRAZIL RADIO CULTURA Foz do Iguaçú	Alternative Frequency to 6105kHz
6085	AFGHANISTAN RADIO AFGHANISTAN Kabul	7.5kW::SAS/ME 100kW::SAS/ME 7.5kW:DS-2:SAS/ME
	BULGARIA RADIO SOFIA Elin Pelin-Stolnik	150kW::EU/ME/NAF (D):150kW::EU/ME/NAF M-Sa:150kW::EU/ME/NAF Su:150kW::EU/ME/NAF
	COLOMBIA ONDAS DEL DARIEN Turbo	1kW:DS
(con'd)	GERMANY (FR) BAYERISCHER RFUNK Ismaning	100kW:DS-1/ARD-NACHT

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬

ARABIC / عرب ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location
6085 (con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l DEUTSCHE WELLE Via Antigua DEUTSCHE WELLE Via Cyclops, Malta OMAN RADIO OMAN Sib USA VOICE OF AMERICA Via Kaválla, Greece WYFR-FAMILY RADIO Okeechobee,Florida
6087	CHINA (TAIWAN) CENTRAL BC SYSTEM T'ai-pei
6089v	NIGERIA RADIO NIGERIA Kaduna
6089.8	BRAZIL RADIO BANDEIRANTES São Paulo
6090	CUBA RADIO HABANA Havana KAMPUCHEA (CAMBODIA) VO THE PEOPLE Phnom Penh LIBERIA LIBERIAN BC SYSTEM Monrovia LUXEMBOURG RADIO LUXEMBOURG Junglinster PAKISTAN PAKISTAN BC CORP Islamabad USA VOICE OF AMERICA Via Ismaning, GFR VOICE OF AMERICA Via Kaválla, Greece VOICE OF AMERICA Via Tangier,Morocco USSR IRKUTSK RADIO Irkutsk +RADIO MOSCOW Orenburg RADIO MOSCOW/RP&P Simferopol
6090v	ARGENTINA RADIO BELGRANO Buenos Aires
6090.5	GUATEMALA UNION RADIO-AWR Guatemala City
6095 (con'd)	CHINA (PR) CENTRAL PEOPLES BS Nanchang COLOMBIA LA VOZ DEL CENTRO Espinal POLAND RADIO POLONIA Warsaw



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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —

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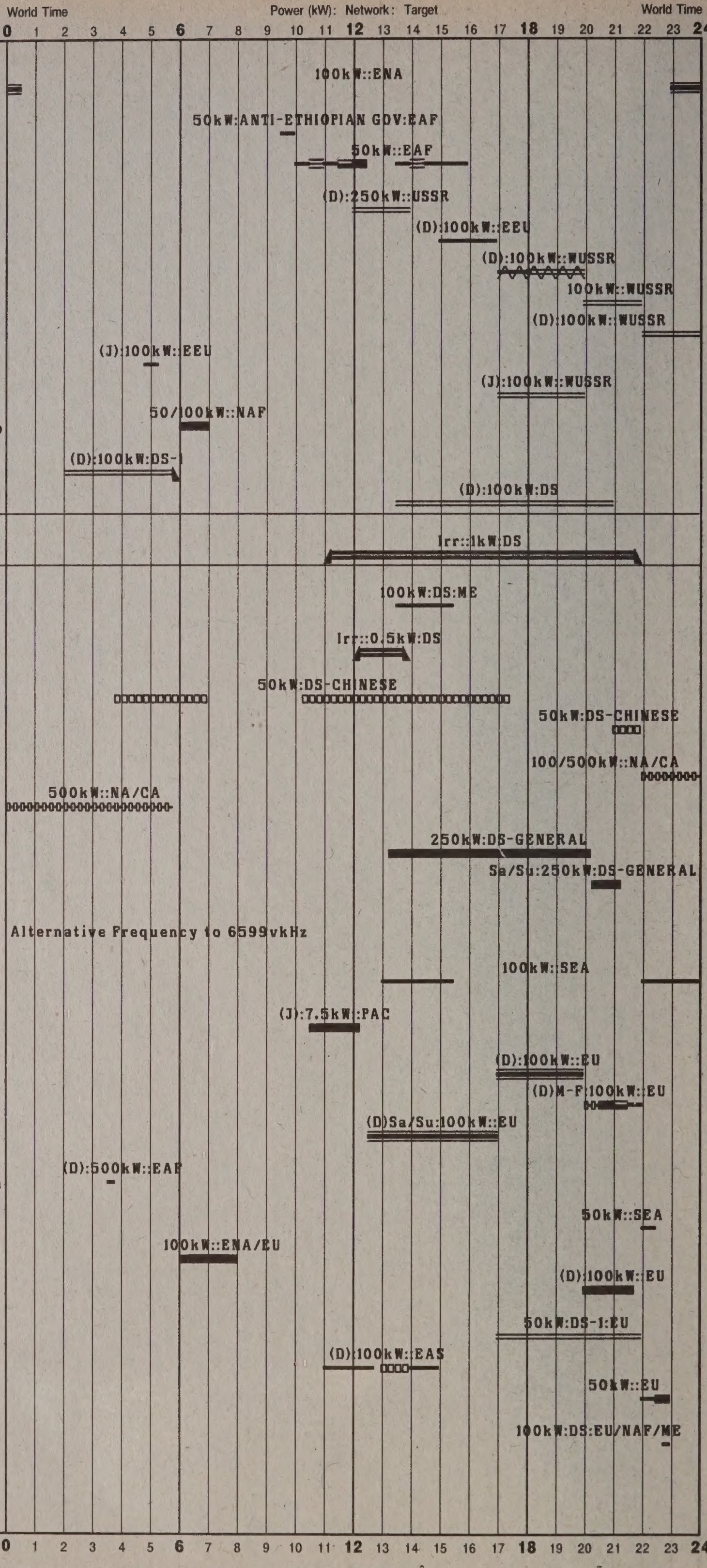


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6095 (con'd)	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	100kW::ENA
	SOMALIA "VO SOMALI ABO LF" via R Mogadishu	50kW:ANTI-ETHIOPIAN GOV:EAF
	RADIO MOGADISHU Mogadishu	50kW::EAF
	USA KGEI-VO FRIENDSHIP Redwood City, Ca	(D):250kW::USSR
	RFE-RL Via Germany (FR)	(D):100kW::EEU (D):100kW::WUSSR
	VOICE OF AMERICA Via Ismaning, GFR	100kW::WUSSR (D):100kW::WUSSR (J):100kW::EEU (J):100kW::WUSSR
	VOICE OF AMERICA Via Tangier,Morocco	50/100kW::NAF
	USSR RADIO MOSCOW Kalinin	(D):100kW:DS-1
	+RADIO MOSCOW Serpuhkov	(D):100kW:DS
6099.3	CHILE RADIO CALAMA Calama	Irr::1kW:DS
6100	AFGHANISTAN RADIO KABUL Kabul	100kW:DS:ME
	ARGENTINA R PROV SANTA CRUZ Rio Gallegos	Irr::0.5kW:DS
	CHINA (PR) XINJIANG PBS Urümqi	50kW:DS-CHINESE
	+XINJIANG PBS Urümqi	50kW:DS-CHINESE
	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	100/500kW::NA/CA
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::NA/CA
	KENYA VOICE OF KENYA Nairobi	250kW:DS-GENERAL Sa/Su:250kW:DS-GENERAL
	KOREA (DPR) KOREAN CENTRAL BS Pyŏngyang	Alternative Frequency to 6599vkHz
	MALAYSIA VOICE OF MALAYSIA Kajang	100kW::SEA
	NEW ZEALAND RADIO NEW ZEALAND Wellington	(J):7.5kW::PAC
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	(D):100kW::EU (D)M-F:100kW::EU (D)Sa/Su:100kW::EU
	UNITED KINGDOM BBC Holywell-Rampisham	(D):500kW::EAF
	USA VOICE OF AMERICA Via Philippines	50kW::SEA
	WORLD HARVEST R Noblesville,Indiana	100kW::ENA/EU
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::EU
	USSR RADIO MOSCOW Kaunas	50kW:DS-1:EU
	RADIO MOSCOW/RP&P Kenga	(D):100kW::EAS
	RADIO VILNIUS Kaunas	50kW::EU
(con'd)	YUGOSLAVIA RADIO KOPER Belgrade	100kW:DS:EU/NAF/ME

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ═
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

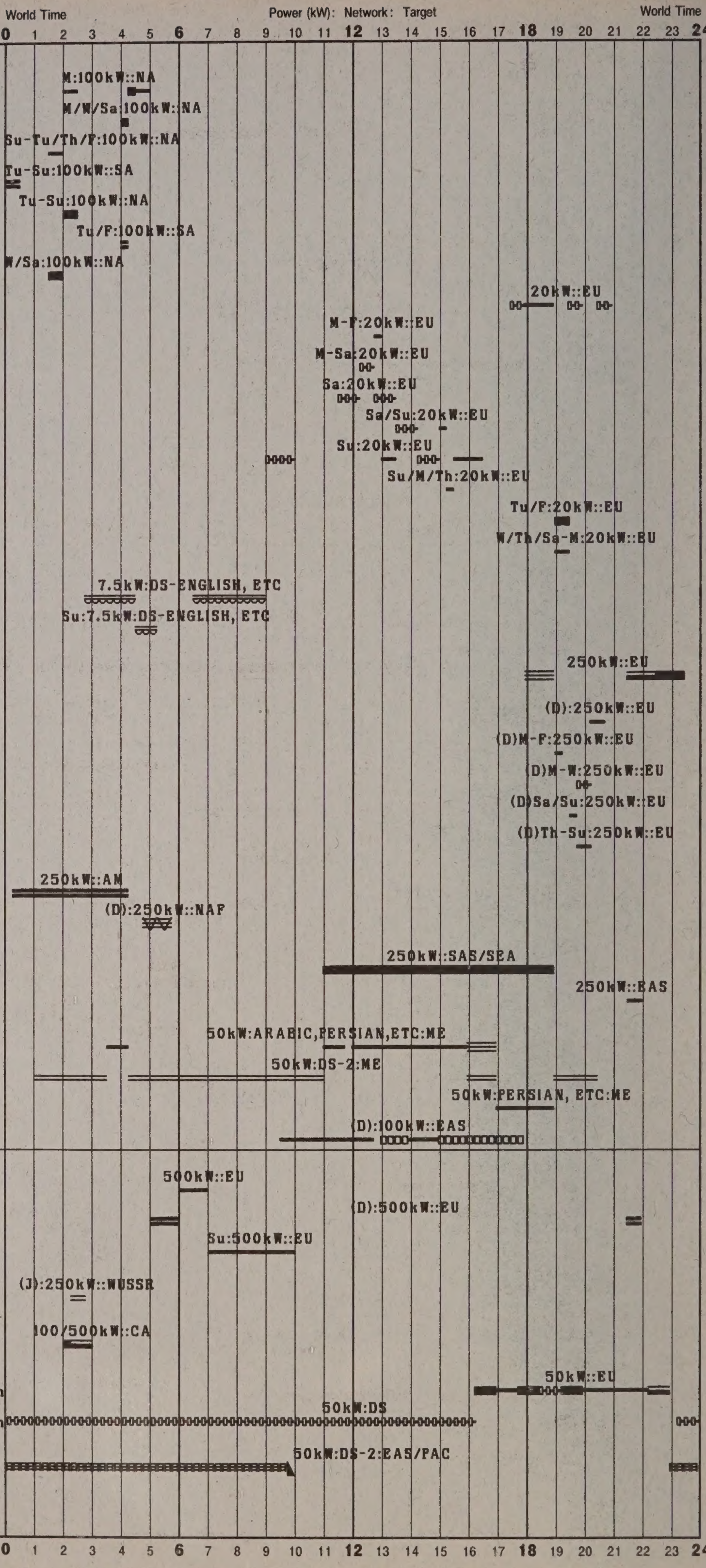
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6100 (con'd)	YUGOSLAVIA RADIO LJUBLJANA Belgrade	M:100kW:DS-ENGLISH, ETC:EU/NAF/ME
	RADIO YUGOSLAVIA Belgrade	100kW::EU/NAF/ME (D):100kW::EU/NAF/ME
	RADIO ZAGREB Belgrade	Th:100kW:DS-MARINERS:EU/NAF
	VARIOUS LOCAL STNS Belgrade	Tu-Su:100kW:DS:EU/NAF/ME
6100v	NICARAGUA LV DE NICARAGUA Managua	Irr::50kW:DS:CA
	VENEZUELA OBSERVATORIO NAVAL Caracas	Irr::1kW:DS
6105	BRAZIL RADIO CULTURA Foz do Iguaçú	Alt 6083kHz:5kW:DS
	GERMANY (DR) RADIO BERLIN INTL Nauen	100kW::WEU
	INDIA ALL INDIA RADIO Delhi	100kW::SAS
	MEXICO SU PANTERA Mérida	Irr::0.25kW:DS
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::EU
	SOUTH AFRICA SOUTH AFRICAN BC Meyerton	Alt 7205kHz:100kW:DS-RADIO ORANJE
	TANZANIA RADIO TANZANIA Dar es Salaam	AF DS
	USA RFE-RL Via Germany (FR)	(D):20/250kW::WUSSR 20/100/250kW::WUSSR (J):100kW::EEU (J)M-Sa:100kW::EEU (D)Sa/Su:100kW::WUSSR (J)Su:100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR (J):50/250kW::EEU (D)M-F:50/250kW::EEU
	VOICE OF AMERICA Via Rhodes, Greece	50kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::SA
	USSR RADIO MOSCOW Kalinin	120kW:DS-1 (D):120kW:DS-1
	RADIO MOSCOW/RP&P L'vov	(D):500kW::ENA/CA
6105.5	BOLIVIA RADIO PANAMERICANA La Paz	10kW:DS M-Sa:10kW:DS Tu-Sa:10kW:DS
6105.6	COSTA RICA RADIO UNIVERSIDAD San José	Irr::2kW:DS
6110	HOLLAND RADIO NEDERLAND Flevoland	500kW::WEU/ATL
	HUNGARY RADIO BUDAPEST Erd-Diósd	100kW::SA 100kW::NA 100kW::WEU M:100kW::SA
(con'd)		

ENGLISH ▬ GERMAN / DEUTSCH ⊶⊶ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ═ SPANISH / ESPAÑOL ═

ARABIC / ﻋﺮﺑﻲ ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6110 (con'd)	**HUNGARY** RADIO BUDAPEST Erd-Diósd	M:100kW::NA M/W/Sa:100kW::NA Su-Tu/Th/F:100kW::NA Tu-Su:100kW::SA Tu-Su:100kW::NA Tu/F:100kW::SA W/Sa:100kW::NA
	RADIO BUDAPEST Szekésfehérvár	20kW::EU M-F:20kW::EU M-Sa:20kW::EU Sa:20kW::EU Sa/Su:20kW::EU Su:20kW::EU Su/M/Th:20kW::EU Tu/F:20kW::EU W/Th/Sa-M:20kW::EU
	INDIA RADIO KASHMIR Srinagar	7.5kW:DS-ENGLISH, ETC
	RADIO KASHMIR Srinigar	Su:7.5kW:DS-ENGLISH, ETC
	MALTA R MEDITERRANEAN Maršaxlokk Cyclops	250kW::EU
	SWEDEN IBRA RADIO Via Cyclops, Malta	(D):250kW::EU (D)M-F:250kW::EU (D)M-W:250kW::EU (D)Sa/Su:250kW::EU (D)Th-Su:250kW::EU
	UNITED KINGDOM BBC Multiple Locations	250kW::AM
	BBC Skelton, Cumbria	(D):250kW::NAF
	USA VOICE OF AMERICA Via Philippines	250kW::SAS/SEA 250kW::EAS
	USSR RADIO BAKU Baku	50kW:ARABIC,PERSIAN,ETC:ME
	RADIO MOSCOW Baku	50kW:DS-2:ME
	RADIO MOSCOW/RP&P Baku	50kW:PERSIAN, ETC:ME
	RADIO MOSCOW/RP&P Novosibirsk	(D):100kW::EAS
6115	**BULGARIA** RADIO SOFIA Plovdiv	500kW::EU (D):500kW::EU Su:500kW::EU
	CANADA RADIO CANADA INTL Via Sines, Portugal	(J):250kW::WUSSR
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100/500kW::CA
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	50kW::EU
	STIMME DER DDR Königswusterhausen	50kW:DS
	JAPAN NIHON SHORTWAVE BC Tōkyō-Nagara	50kW:DS-2:EAS/PAC
(con'd)		



ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ≡
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ = CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ≡ OTHER —
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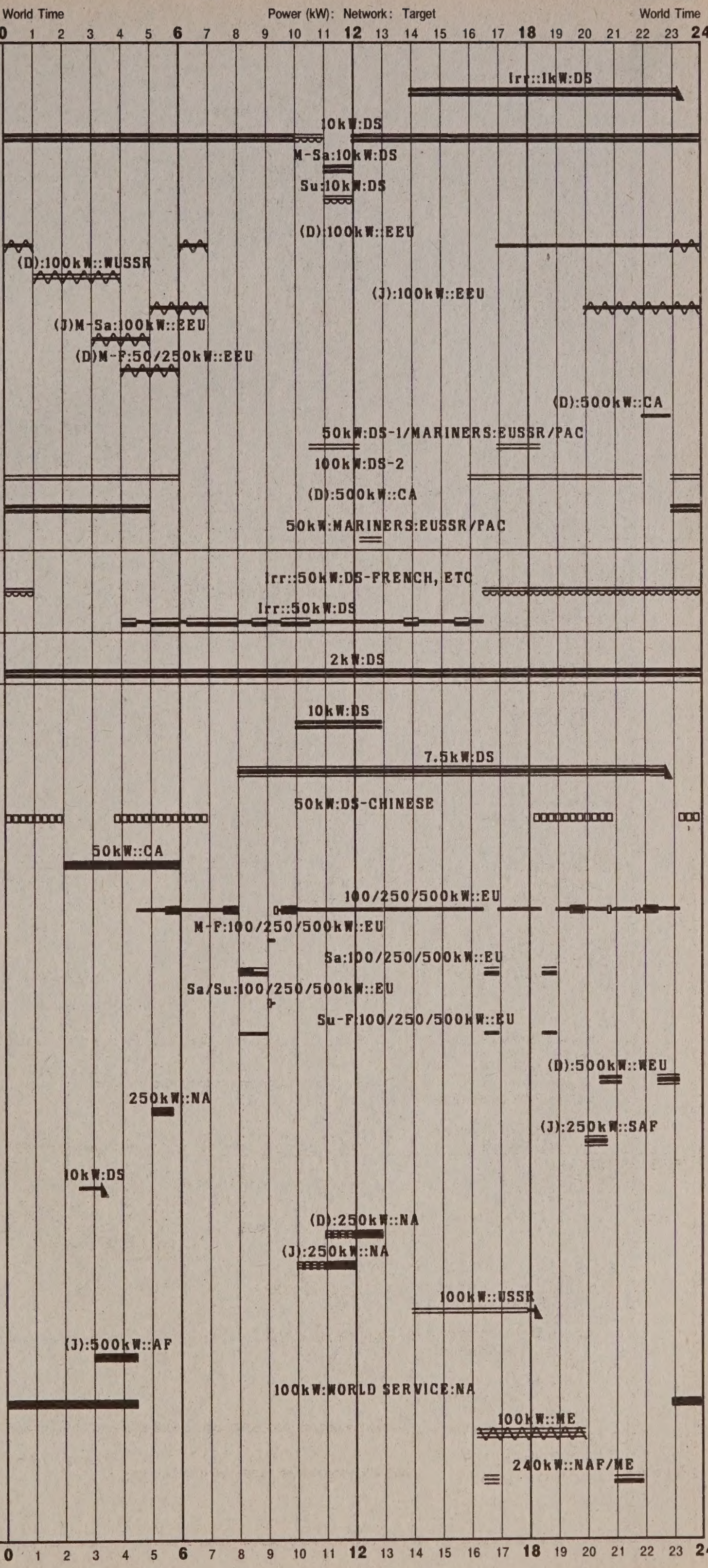
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6115 (con'd)	**MEXICO** RADIO UNIVERSIDAD Hermosillo	Irr::1kW:DS
	PERU RADIO UNION Lima	10kW:DS M-Sa:10kW:DS Su:10kW:DS
	USA RFE-RL Via Germany (FR)	(D):100kW::EEU (D):100kW::WUSSR (J):100kW::EEU (J)M-Sa:100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D)M-F:50/250kW::EEU
	USSR RADIO KIEV Armavir	(D):500kW::CA
	RADIO MOSCOW Khabarovsk	50kW:DS-1/MARINERS:EUSSR/PAC
	RADIO MOSCOW Simferopol'	100kW:DS-2
	RADIO MOSCOW/RP&P Armavir	(D):500kW::CA
	RADIO TIKHIY OKEAN Khabarovsk	50kW:MARINERS:EUSSR/PAC
6115v	**CONGO** RTV CONGOLAISE Brazzaville	Irr::50kW:DS-FRENCH, ETC Irr::50kW:DS
6116v	**COLOMBIA** LA VOZ DEL LLANO Villavicencio	2kW:DS
6120	**ARGENTINA** RADIO NACIONAL Buenos Aires	10kW:DS
	BRAZIL RADIO GLOBO São Paulo	7.5kW:DS
	CHINA (PR) XINJIANG PBS Ürümqi	50kW:DS-CHINESE
	CUBA RADIO HABANA Havana	50kW::CA
	FINLAND RADIO FINLAND Pori	100/250/500kW::EU M-F:100/250/500kW::EU Sa:100/250/500kW::EU Sa/Su:100/250/500kW::EU Su-F:100/250/500kW::EU
	GERMANY (FR) +DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::WEU
	DEUTSCHE WELLE Via Antigua	250kW::NA
	DEUTSCHE WELLE Via Sri Lanka	(J):250kW::SAF
	INDIA ALL INDIA RADIO Hyderabad	10kW:DS
	JAPAN RADIO JAPAN/NHK Via Sackville, Can	(D):250kW::NA (J):250kW::NA
	PHILIPPINES FAR EAST BC CO Iba	100kW::USSR
	SOUTH AFRICA RADIO RSA Meyerton	(J):500kW::AF
	UNITED KINGDOM BBC Via Sackville, Can	100kW:WORLD SERVICE:NA
	BBC Via Zyyi, Cyprus	100kW::ME
(con'd)	**USSR** RADIO MOSCOW/RP&P Armavir	240kW::NAF/ME



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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
6120 (con'd)	USSR RADIO MOSCOW/RP&P Armavir	240kW:WS:NAF/ME
	RADIO YEREVAN Armavir	240kW::NAF/ME
6120v	NICARAGUA RADIO ZINICA Bluefields	2kW:DS-SPANISH,ENGLISH
6125	AFGHANISTAN 'R IRAN TOILERS' Via R Afghanistan	100kW:TUDEH COMMUNIST:ME
	RADIO AFGHANISTAN Kabul	100kW::ME/SAS
	ALBANIA RADIO TIRANA Lushnjë	50kW:GREEK:EU
	CHINA (PR) CENTRAL PEOPLES BS Shijiazhuang	50kW:DS-1
	CYPRUS CYPRUS BC CORP Zyyi	F-Su:250kW::EU
	GERMANY (DR) RADIO BERLIN INTL Nauen	500kW::CA
	IRAQ RADIO BAGHDAD Baghdad-Abu Ghraib	(D):250kW::ME
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::NA/CA (D):350kW::NA/CA
	UNITED ARAB EMIRATES VOICE OF THE UAE Abu Dhabi	Irr
	UNITED KINGDOM BBC Holywell-Rampisham	500kW::WEU 500kW::EEU/WUSSR Su:500kW::WEU Su:500kW::EEU/WUSSR
	USA AFRTS-US MILITARY Delano, California	(D):250kW:DS-ABC/CBS/NBC/NPR:EAS/SEA
	VOICE OF AMERICA Cincinnati, Ohio	250kW::WAF
	VOICE OF AMERICA Via Woofferton, UK	300kW::NAF (D):250kW::WUSSR (J):250/300kW::WUSSR (J):250kW:TURKISH, ETC:EEU/ME
	USSR +RADIO MOSCOW Ashkhabad	(D):100kW:DS-1
	+RADIO MOSCOW Ul'yanovsk	(D):100kW:DS-1
6127	INDONESIA R REP INDONESIA Nabire, Irian Jaya	Alternative Frequency to 5055.4kHz
6127.5	INDONESIA R REP INDONESIA Nabire, Irian Jaya	0.5kW:DS
6130	CANADA CHNX-CHNS Halifax, NS	0.5kW:DS
	DENMARK DANMARKS RADIO Copenhagen	50kW::EU/WAF
	ECUADOR HCJB-VO THE ANDES Quito	100kW::PAC
	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	100/500kW::NA
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EEU (D):500kW::WUSSR (J):500kW::WEU
(con'd)	DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::NAF/WAF

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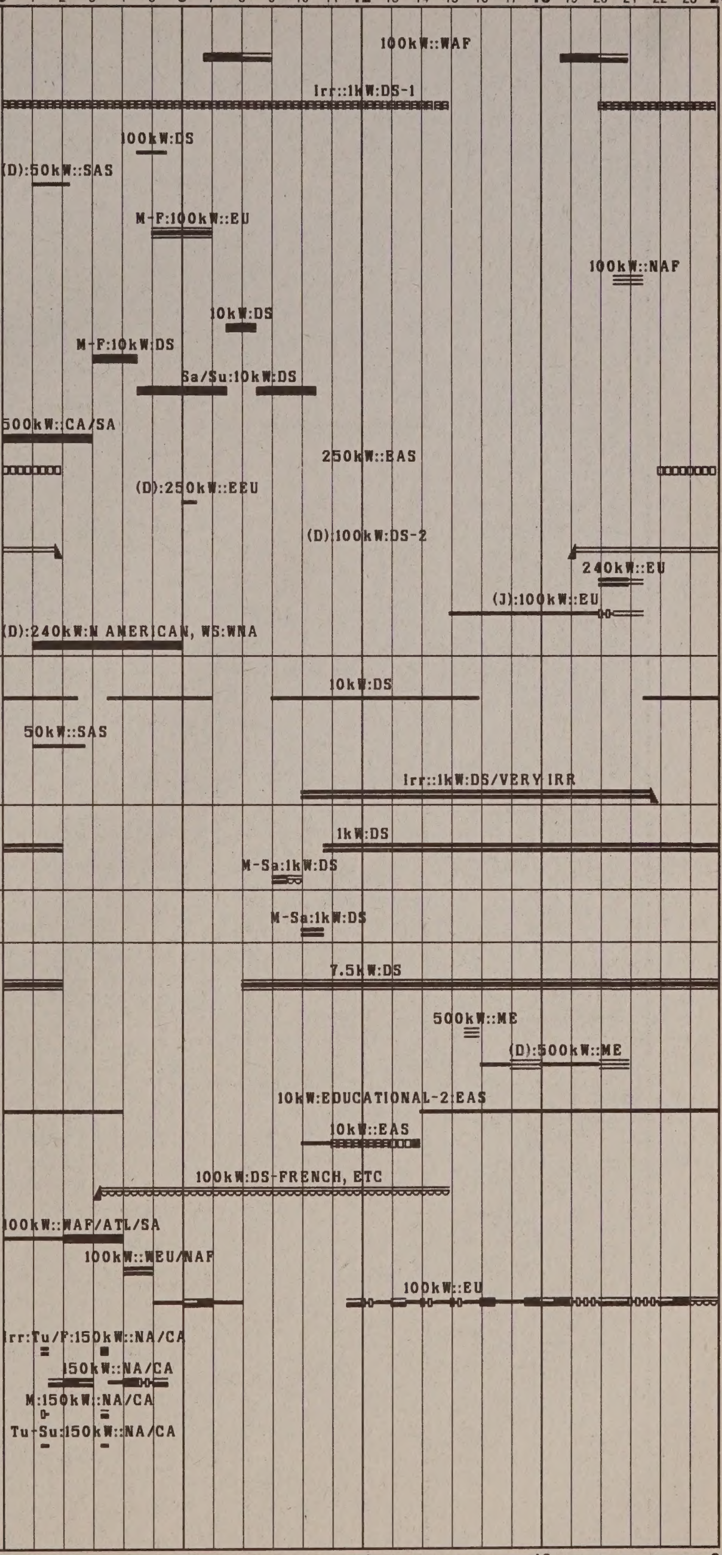
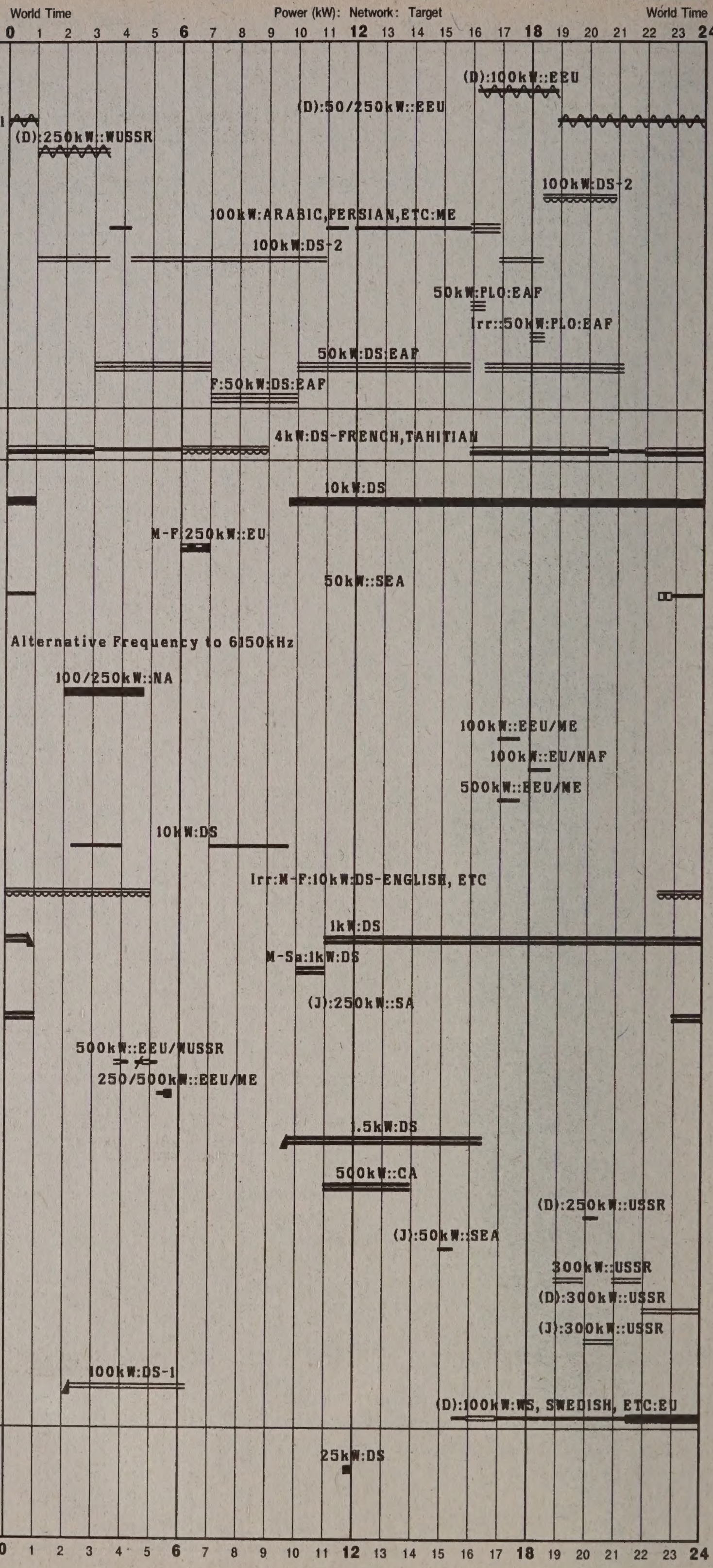


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6130 (con'd)	**GHANA**	
	RADIO GHANA Accra	100kW::WAF
	JAPAN	
	NIPPON HOSO KYOKAI Kumamoto-Shimizu	Irr::1kW:DS-1
	PAKISTAN	
	PAKISTAN BC CORP Islamabad	100kW:DS
	RADIO PAKISTAN Karachi	(D):50kW::SAS
	PORTUGAL	
	RADIO PORTUGUESA Lisbon-São Gabriel	M-F:100kW::EU
	SPAIN	
	R EXTERIOR ESPANA Arganda	100kW::NAF
	SRI LANKA	
	SRI LANKA BC CORP Colombo-Ekala	10kW:DS M-F:10kW:DS Sa/Su:10kW:DS
	USA	
	VOICE OF AMERICA Greenville, NC	500kW::CA/SA
	VOICE OF AMERICA Via Philippines	250kW::EAS
	VOICE OF AMERICA Via Woofferton, UK	(D):250kW::EEU
	USSR	
	RADIO MOSCOW Novosibirsk	(D):100kW:DS-2
	RADIO MOSCOW/RP&P Moscow	240kW::EU
	RADIO MOSCOW/RP&P Star'obel'sk	(J):100kW::EU
	RADIO MOSCOW/RP&P Vladivostok	(D):240kW:N AMERICAN, WS:WNA
6130v	**LAOS**	
	LAO NATIONAL RADIO Vientiane	10kW:DS
	PAKISTAN	
	RADIO PAKISTAN Karachi	50kW::SAS
	VENEZUELA	
	R VALLES DEL TUY Ocumare Del Tuy	Irr::1kW:DS/VERY IRR
6134.3	**BOLIVIA**	
	RADIO SANTA CRUZ Santa Cruz	1kW:DS M-Sa:1kW:DS
6134.4	**BOLIVIA**	
	RADIO SANTA CRUZ Santa Cruz	M-Sa:1kW:DS
6135	**BRAZIL**	
	RADIO APARECIDA Aparecida	7.5kW:DS
	BULGARIA	
	RADIO SOFIA Plovdiv	500kW::ME (D):500kW::ME
	KOREA (REPUBLIC)	
	KOREAN BC SYSTEM Suwŏn	10kW:EDUCATIONAL-2:EAS
	RADIO KOREA Suwŏn	10kW::EAS
	MADAGASCAR	
	R MADAGASIKARA Antananarivo	100kW:DS-FRENCH, ETC
	POLAND	
	RADIO POLONIA Warsaw	100kW::WAF/ATL/SA 100kW::WEU/NAF 100kW::EU
	SWITZERLAND	
	RED CROSS BC SVC Schwarzenburg	Irr:Tu/F:150kW::NA/CA
	SWISS RADIO INTL Schwarzenburg	150kW::NA/CA M:150kW::NA/CA Tu-Su:150kW::NA/CA
(con'd)		

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6135 (con'd)	USA	
	RFE-RL Via Germany (FR)	(D):100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	USSR	
	AZERBAIJANI RADIO Baku	100kW:DS-2
	RADIO BAKU Baku	100kW:ARABIC,PERSIAN,ETC:ME
	RADIO MOSCOW Baku	100kW:DS-2
	YEMEN (REPUBLIC)	
	'VO PALESTINE' Via Radio San'ā	50kW:PLO:EAF Irr::50kW:PLO:EAF
	RADIO SAN'A San'ā	50kW:DS:EAF F:50kW:DS:EAF
6135.3	SOCIETY ISLANDS	
	RFO-TAHITI Papeete	4kW:DS-FRENCH,TAHITIAN
6140	AUSTRALIA	
	AUSTRALIAN BC CORP Perth	10kW:DS
	CANADA	
	RADIO CANADA INTL Sackville, NB	M-F:250kW::EU
	CHINA (PR)	
	RADIO BEIJING Kunming	50kW::SEA
	COSTA RICA	
	RADIO IMPACTO San José	Alternative Frequency to 6150kHz
	CUBA	
	RADIO HABANA Havana	100/250kW::NA
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	100kW::EEU/ME 100kW::EU/NAF
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EEU/ME
	INDIA	
	ALL INDIA RADIO Ranchi	10kW:DS
	PAPUA NEW GUINEA	
	RADIO EAST SEPIK Wewak	Irr:M-F:10kW:DS-ENGLISH, ETC
	PERU	
	RADIO HUAYLLAY Huayllay	1kW:DS M-Sa:1kW:DS
	SOUTH AFRICA	
	RADIO RSA Meyerton	(J):250kW::SA
	UNITED KINGDOM	
	BBC Holywell-Rampisham	500kW::EEU/WUSSR
	BBC Multiple Locations	250/500kW::EEU/ME
	URUGUAY	
	RADIO MONTE CARLO Montevideo	1.5kW:DS
	USA	
	VOICE OF AMERICA Greenville, NC	500kW::CA
	VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::USSR
	VOICE OF AMERICA Via Philippines	(J):50kW::SEA
	VOICE OF AMERICA Via Woofferton, UK	300kW::USSR (D):300kW::USSR (J):300kW::USSR
	USSR	
	RADIO MOSCOW Voronej	100kW:DS-1
	RADIO MOSCOW/RP&P Zhigulevsk	(D):100kW:WS, SWEDISH, ETC:EU
6140v (con'd)	BURUNDI	
	LA VOIX DE LA REV Bujumbura	25kW:DS



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ARABIC / عربي ☰ RUSSIAN / PYCCKИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▭ MULTILINGUAL ▭ OTHER ─
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	World Time 0–24 · Power (kW): Network: Target
6140v (con'd)	BURUNDI LA VOIX DE LA REV Bujumbura	25kW:DS-FRENCH, ETC Su:25kW:DS-FRENCH, ETC
6140.8	BOLIVIA R LUIS DE FUENTES Tarija	1kW:DS
6143	KAMPUCHEA (CAMBODIA) VO THE PEOPLE Phnom Penh	DS
6145	ALBANIA +RADIO TIRANA Lushnjë	50kW::EU
	ALGERIA 'VO PALESTINE' Via RTV Algerienne	50kW:PLO:NAF/ME
	RTV ALGERIENNE Algiers	50kW:DS:NAF/ME
	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	100/500kW::EU/NAF/SA 100/500kW::NA/CA 100/500kW::EU/NAF/NA
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::NAF/ME
	INDIA ALL INDIA RADIO Delhi	100kW::ME/NAF
	NETHERLANDS ANTILLES TRANS WORLD RADIO Bonaire	50kW::SA M:50kW::SA
	NIGERIA +CROSS RIVER RADIO Calabar	10kW:DS-ENGLISH, ETC
	PHILIPPINES FAR EAST BC CO Bocaue	(D):50kW::EAS (D):10kW::EAS
	USA VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::SAS
	USSR RADIO MOSCOW/RP&P Moscow	(D):100kW::CA (D):100kW::EU (D):100kW:WS:EU
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::SAS
6150	BRAZIL RADIO RECORD São Paulo	Irr::7.5kW:DS 7.5kW:DS
	COLOMBIA LA VOZ DEL HUILA Neiva	Irr::1kW:DS
	COSTA RICA RADIO IMPACTO San José	Alt 6140kHz:20kW:DS Alt 6140kHz:Irr::20kW:DS
	DENMARK DANMARKS RADIO Copenhagen	50kW::SA
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EU
	KENYA VOICE OF KENYA Nairobi	250kW:DS-NATIONAL Sa/Su:250kW:DS-NATIONAL
	PERU RADIO CONCORDIA Arequipa	1kW:DS
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::ME (D):250kW::EU
(con'd)		

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6150 (con'd)	UNITED KINGDOM BBC Holywell-Rampisham	500kW::EEU M-Sa:500kW::EEU Su:500kW::EEU
	USA KGEI-VO FRIENDSHIP Redwood City, Ca	(D):250kW::USSR
	VOICE OF AMERICA Via Ismaning, GFR	100kW::WUSSR (D):100kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::WUSSR (D):250kW:HINDI,PERSIAN,ETC:ME/SAS
	VOICE OF AMERICA Via Tangier,Morocco	100kW::NAF
	VOICE OF AMERICA Via Woofferton, UK	300kW::EEU (D):300kW::EEU (J):300kW::EEU
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	500kW::NA/CA 100kW::NA
6150v	CHINA (PR) HEILONGJIANG PBS Harbin	50kW:LOCAL DS-1
6152v	ANGOLA ER DE BENGUELA Benguela	1kW:DS-PORTUGUESE, ETC
6154	ANGOLA ER DE BENGUELA Benguela	1kW:DS
6154.8	PERU RADIO PUCALLPA Pucallpa	1kW:DS
6155	AUSTRIA RADIO AUSTRIA INTL Vienna	100/300/500kW::EU/NAF/ME 100kW::WEU/NAF (D):500kW::ENA M-F:100/300/500kW::EU/NAF/ME M-Sa:100/300/500kW::EU/NAF/ME M-Sa:100kW::WEU/NAF (D)M-Sa:500kW::ENA Sa/Su:100/300/500kW::EU/NAF/ME Su:100/300/500kW::EU/NAF/ME Su:100kW::WEU/NAF (D)Su:500kW::ENA
	CHINA (PR) GANSU PEOPLES BS Lanzhou	15kW:DS-CHINESE
	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(D):100kW::EU
	INDIA ALL INDIA RADIO Delhi	100kW::SAS
	LIBYA RADIO JAMAHIRIYA Tripoli	500kW::NAF/WAF
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AM (J):250kW::EU
	SINGAPORE SINGAPORE BC CORP Jurong	50kW:DS-MALAY:SEA/PAC
	TOGO RADIO KARA Lama-Kara	10kW:DS-FRENCH, ETC Sa/Su:10kW:DS-FRENCH, ETC
(con'd)		

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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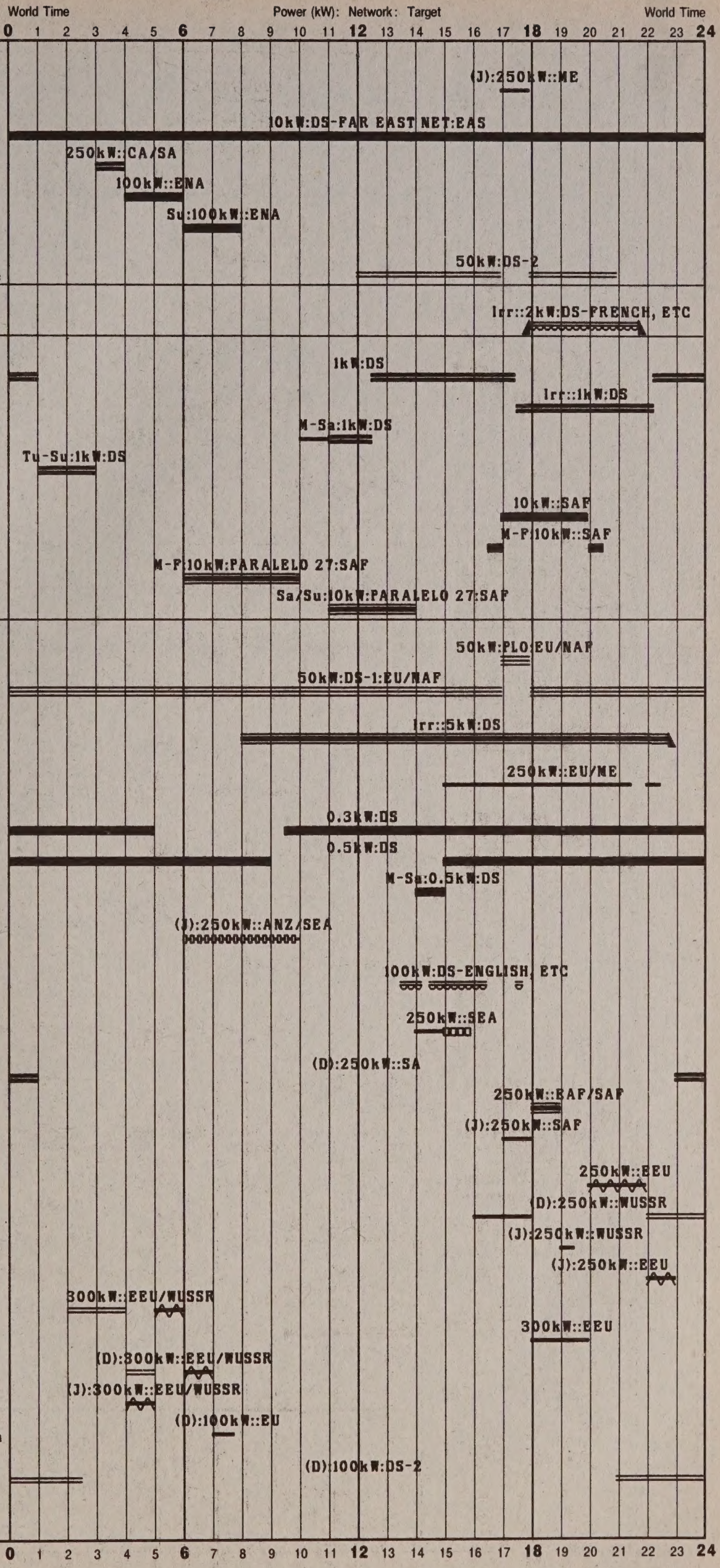
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6155 (con'd)	**TURKEY** TURKISH RTV CORP Ankara	(J):250kW::ME
	USA AFRTS-US MILITARY Via Tōkyō, Japan	10kW:DS-FAR EAST NET:EAS
	VOICE OF AMERICA Dixon, California	250kW::CA/SA
	WORLD HARVEST R Noblesville,Indiana	100kW::ENA
	WRNO WORLDWIDE New Orleans, La	Su:100kW::ENA
	USSR RADIO MOSCOW Nikolayevsk 'Amure	50kW:DS-2
6155v	**HAITI** RADIO CITADELLE Port-au-Prince	Irr::2kW:DS-FRENCH, ETC
6155.2	**BOLIVIA** RADIO FIDES La Paz	1kW:DS Irr::1kW:DS M-Sa:1kW:DS Tu-Su:1kW:DS
	SWAZILAND SWAZI COMMERCIAL R Sandlane	10kW::SAF M-F:10kW::SAF M-F:10kW:PARALELO 27:SAF Sa/Su:10kW:PARALELO 27:SAF
6160	**ALGERIA** 'VO PALESTINE' Via RTV Algerienne	50kW:PLO:EU/NAF
	RTV ALGERIENNE Ouled Fayet	50kW:DS-1:EU/NAF
	BRAZIL RADIO PAMPA Pôrto Alegre	Irr::5kW:DS
	BULGARIA RADIO SOFIA Rebrovo-Sofia	250kW::EU/ME
	CANADA CKZN-CBN St John's, Nfld	0.3kW:DS
	CKZU-CBU Vancouver, BC	0.5kW:DS M-Sa:0.5kW:DS
	GERMANY (FR) DEUTSCHE WELLE Via Antigua	(J):250kW::ANZ/SEA
	INDIA ALL INDIA RADIO Delhi	100kW:DS-ENGLISH, ETC
	PHILIPPINES RADIO VERITAS ASIA Palauig	250kW::SEA
	SOUTH AFRICA RADIO RSA Meyerton	(D):250kW::SA 250kW::EAF/SAF (J):250kW::SAF
	USA VOICE OF AMERICA Via Kaválla, Greece	250kW::EEU (D):250kW::WUSSR (J):250kW::WUSSR (J):250kW::EEU
	VOICE OF AMERICA Via Woofferton, UK	300kW::EEU/WUSSR 300kW::EEU (D):300kW::EEU/WUSSR (J):300kW::EEU/WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::EU
	USSR RADIO MOSCOW Kazan'	(D):100kW:DS-2



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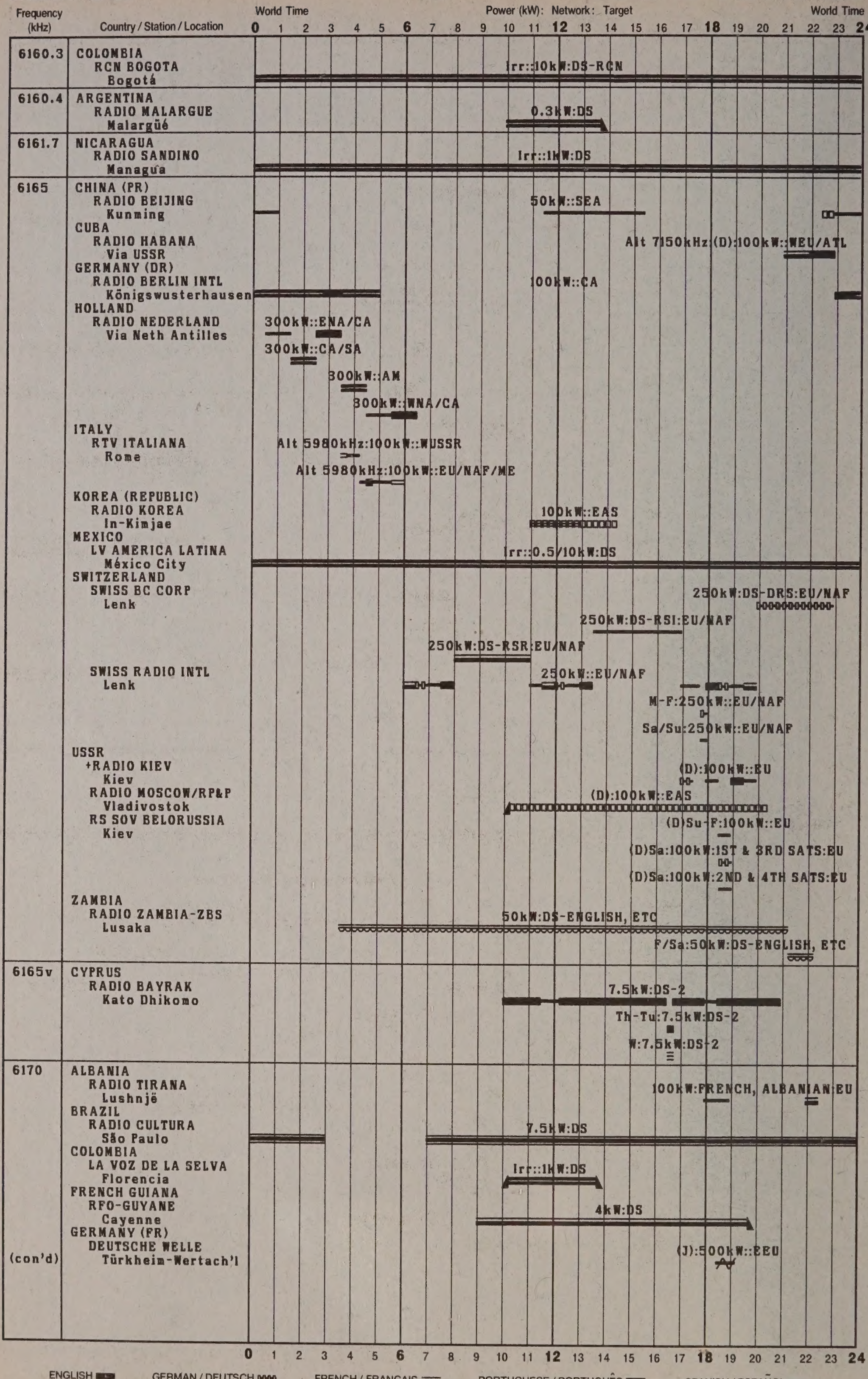

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6160.3	COLOMBIA RCN BOGOTA Bogotá	Irr::10kW:DS-RCN
6160.4	ARGENTINA RADIO MALARGUE Malargüé	0.3kW:DS
6161.7	NICARAGUA RADIO SANDINO Managua	Irr::1kW:DS
6165	CHINA (PR) RADIO BEIJING Kunming	50kW::SEA
	CUBA RADIO HABANA Via USSR	Alt 7150kHz:(D):100kW::WEU/ATL
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	100kW::CA
	HOLLAND RADIO NEDERLAND Via Neth Antilles	300kW::ENA/CA 300kW::CA/SA 300kW::AM 300kW::WNA/CA
	ITALY RTV ITALIANA Rome	Alt 5980kHz:100kW::WUSSR Alt 5980kHz:100kW::EU/NAF/ME
	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	100kW::EAS
	MEXICO LV AMERICA LATINA México City	Irr::0.5/10kW:DS
	SWITZERLAND SWISS BC CORP Lenk	250kW:DS-DRS:EU/NAF 250kW:DS-RSI:EU/NAF 250kW:DS-RSR:EU/NAF
	SWISS RADIO INTL Lenk	250kW::EU/NAF M-F:250kW::EU/NAF Sa/Su:250kW::EU/NAF
	USSR +RADIO KIEV Kiev	(D):100kW::EU
	RADIO MOSCOW/RP&P Vladivostok	(D):100kW::EAS
	RS SOV BELORUSSIA Kiev	(D)Su-F:100kW::EU (D)Sa:100kW:1ST & 3RD SATS:EU (D)Sa:100kW:2ND & 4TH SATS:EU
	ZAMBIA RADIO ZAMBIA-ZBS Lusaka	50kW:DS-ENGLISH, ETC F/Sa:50kW:DS-ENGLISH, ETC
6165v	CYPRUS RADIO BAYRAK Kato Dhikomo	7.5kW:DS-2 Th-Tu:7.5kW:DS-2 W:7.5kW:DS-2
6170	ALBANIA RADIO TIRANA Lushnjë	100kW:FRENCH, ALBANIAN:EU
	BRAZIL RADIO CULTURA São Paulo	7.5kW:DS
	COLOMBIA LA VOZ DE LA SELVA Florencia	Irr::1kW:DS
	FRENCH GUIANA RFO-GUYANE Cayenne	4kW:DS
(con'd)	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::EEU

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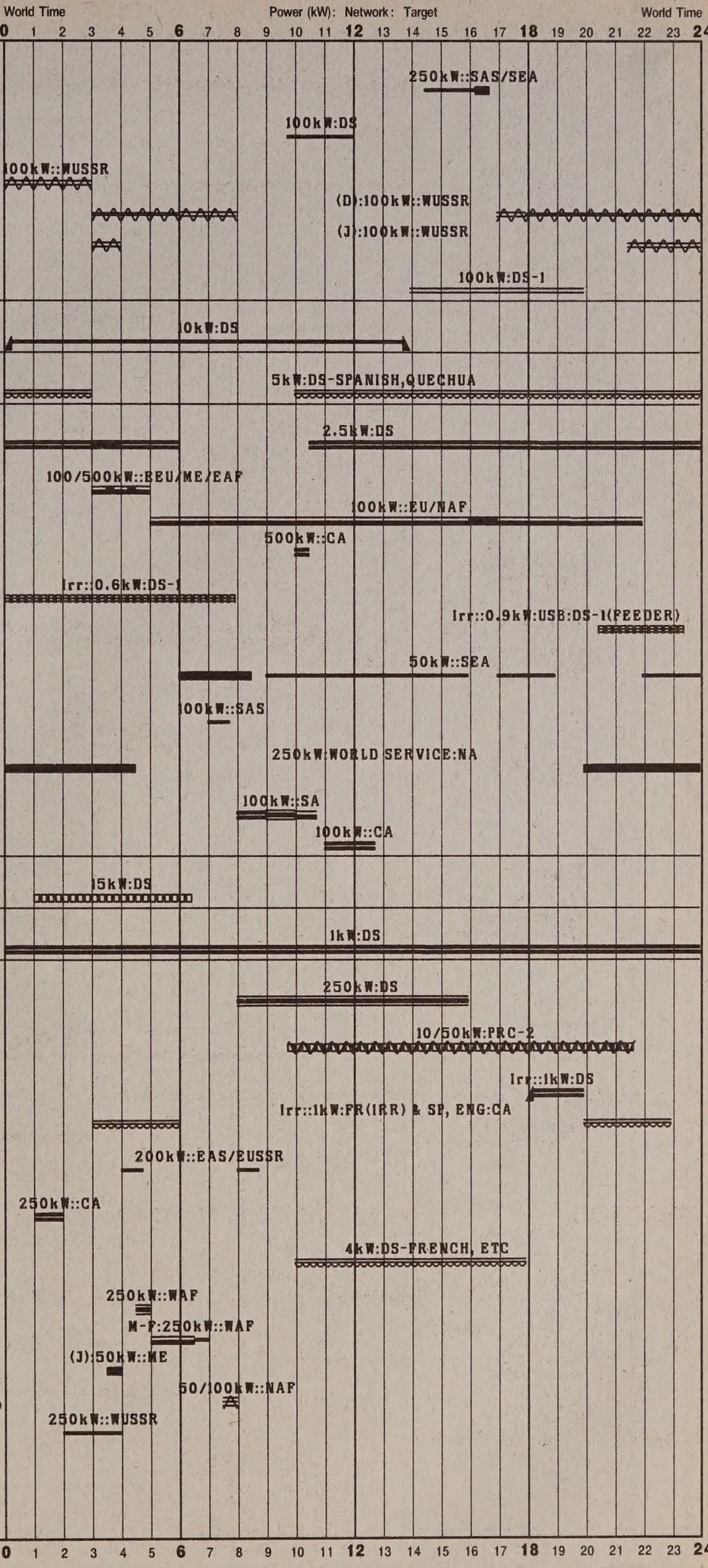
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6170 (con'd)	**GERMANY (FR)** DEUTSCHE WELLE Via Sri Lanka	250kW::SAS/SEA
	PAKISTAN PAKISTAN BC CORP Islamabad	100kW:DS
	USA RFE-RL Via Germany (FR)	100kW::WUSSR (D):100kW::WUSSR (J):100kW::WUSSR
	USSR RADIO MOSCOW Armavir	100kW:DS-1
6170v	**PHILIPPINES** RADYO NG BAYAN Marulas	10kW:DS
6174	**PERU** RADIO TAWANTINSUYO Cuzco	5kW:DS-SPANISH,QUECHUA
6175	**COSTA RICA** FARO DEL CARIBE San José	2.5kW:DS
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100/500kW::EEU/ME/EAF 100kW::EU/NAF
	RADIO FRANCE INTL Via French Guiana	500kW::CA
	JAPAN NIPPON HOSO KYOKAI Hiroshima-Gion	Irr::0.6kW:DS-1
	NIPPON HOSO KYOKAI Tōkyō-Shōbu	Irr::0.9kW:USB:DS-1(FEEDER)
	MALAYSIA VOICE OF MALAYSIA Kajang	50kW::SEA
	PAKISTAN RADIO PAKISTAN Islamabad	100kW::SAS
	UNITED KINGDOM BBC Via Antigua	250kW:WORLD SERVICE:NA
	USA WYFR-FAMILY RADIO Okeechobee,Florida	100kW::SA 100kW::CA
6176	**CHINA (PR)** SHAANXI PEOPLES BS Xi'an	15kW:DS
6179v	**ARGENTINA** RADIO NACIONAL Mendoza	1kW:DS
6180	**BRAZIL** R NAC DA AMAZONIA Brasília	250kW:DS
	CHINA (TAIWAN) CENTRAL BC SYSTEM T'ai-pei	10/50kW:PRC-2
	GUATEMALA LV DE GUATEMALA Guatemala City	Irr::1kW:DS Irr::1kW:FR(IRR) & SP, ENG:CA
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	200kW::EAS/EUSSR
	NETHERLANDS ANTILLES TRANS WORLD RADIO Bonaire	250kW::CA
	SENEGAL ORT DU SENEGAL Ziguinchor	4kW:DS-FRENCH, ETC
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF M-F:250kW::WAF
	VOICE OF AMERICA Via Rhodes, Greece	(J):50kW::ME
	VOICE OF AMERICA Via Tangier,Morocco	50/100kW::NAF
(con'd)	VOICE OF AMERICA Via Woofferton, UK	250kW::WUSSR



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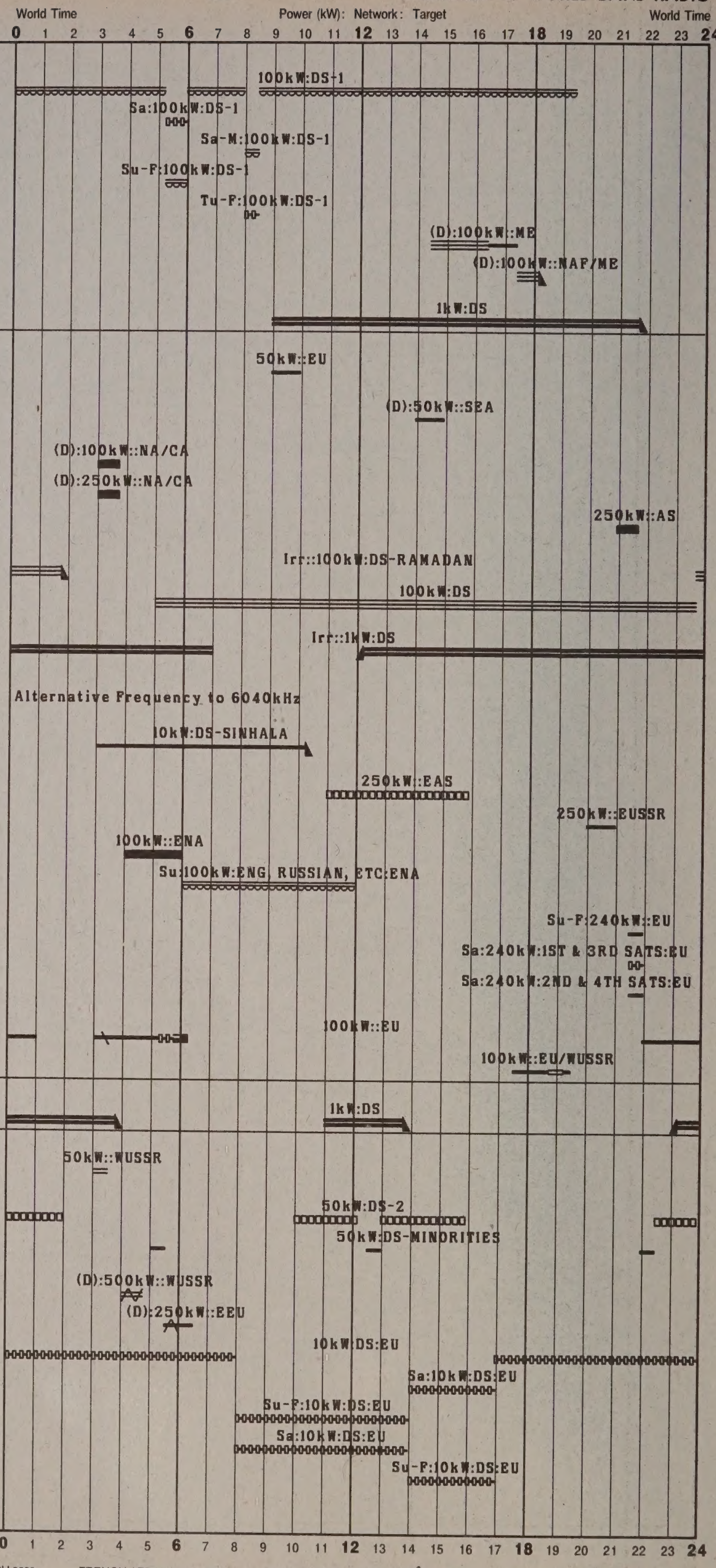

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6180 (con'd)	USSR KAZAKH RADIO Alma-Ata	100kW:DS-1 Sa:100kW:DS-1 Sa-M:100kW:DS-1 Su-F:100kW:DS-1 Tu-F:100kW:DS-1
	+RADIO MOSCOW/RP&P Tula	(D):100kW::ME
	+RADIO MOSCOW/RP&P Tula	(D):100kW::NAF/ME
	VENEZUELA RADIO TURISMO Valera	1kW:DS
6185	ALBANIA RADIO TIRANA Lushnjë	50kW::EU
	CHINA (PR) +RADIO BEIJING Kunming	(D):50kW::SEA
	GERMANY (FR) +DEUTSCHE WELLE Jülich	(D):100kW::NA/CA
	+DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::NA/CA
	DEUTSCHE WELLE Via Sri Lanka	250kW::AS
	LIBYA RADIO JAMAHIRIYA Tripoli	Irr::100kW:DS-RAMADAN 100kW:DS
	MEXICO RADIO EDUCACION México City	Irr::1kW:DS
	NORWAY RADIO NORWAY INTL Sveio	Alternative Frequency to 6040kHz
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	10kW:DS-SINHALA
	USA VOICE OF AMERICA Via Philippines	250kW::EAS 250kW::EUSSR
	WRNO WORLDWIDE New Orleans, La	100kW::ENA Su:100kW:ENG, RUSSIAN, ETC:ENA
	USSR RS SOV BELORUSSIA Ryazan'	Su-F:240kW::EU Sa:240kW:1ST & 3RD SATS:EU Sa:240kW:2ND & 4TH SATS:EU
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EU 100kW::EU/WUSSR
6189v	PERU RADIO ORIENTE Yurimaguas	1kW:DS
6190	ALBANIA RADIO TIRANA Lushnjë	50kW::WUSSR
	CHINA (PR) CENTRAL PEOPLES BS Hohhot	50kW:DS-2 50kW:DS-MINORITIES
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::WUSSR
	DEUTSCHE WELLE Via Sines, Portugal	(D):250kW::EEU
	FREIES BERLIN-SFB Bremen	10kW:DS:EU Sa:10kW:DS:EU
	RADIO BREMEN Bremen	Su-F:10kW:DS:EU Sa:10kW:DS:EU Su-F:10kW:DS:EU
(con'd)		

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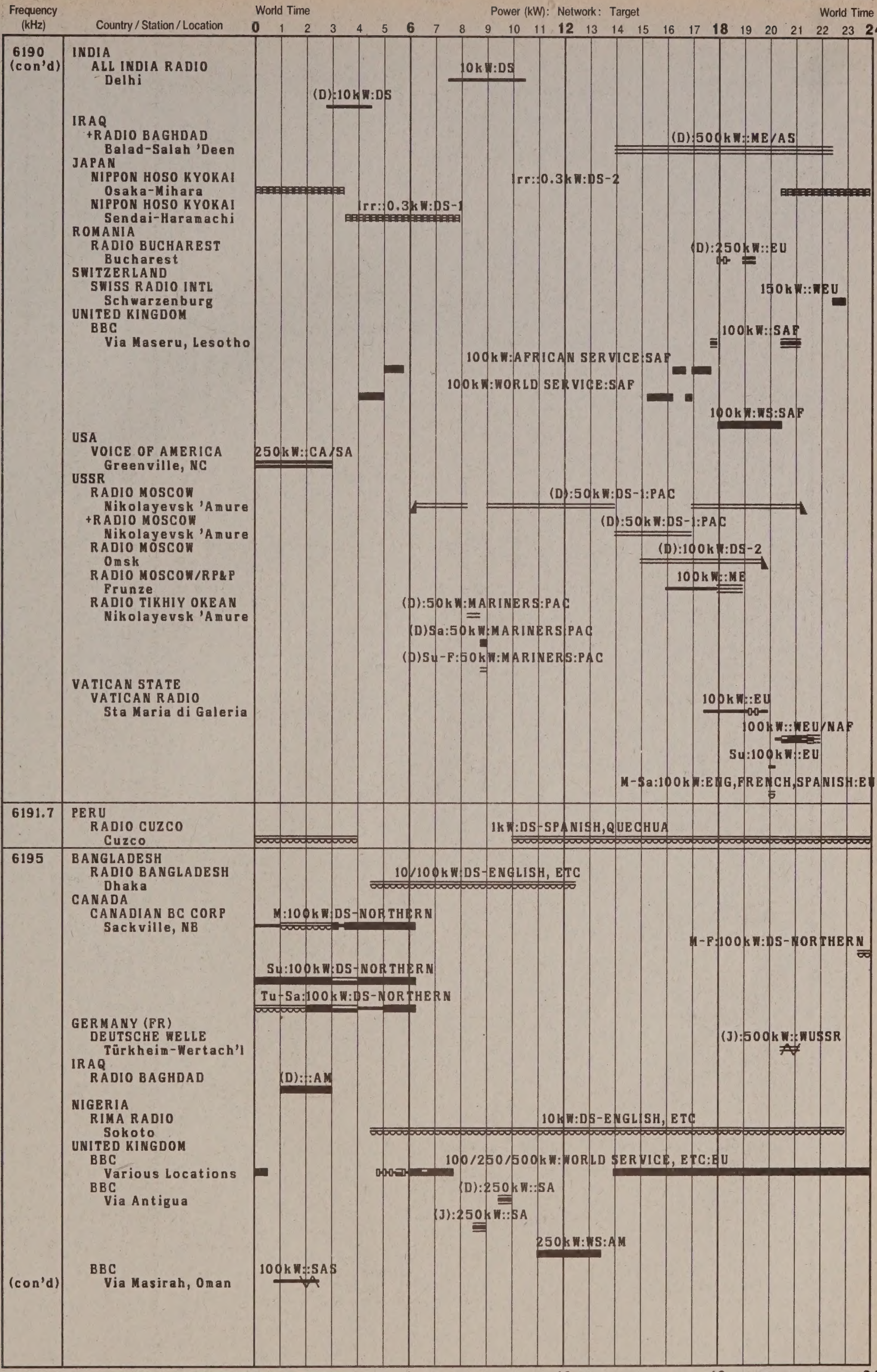

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6190 (con'd)	INDIA ALL INDIA RADIO Delhi	10kW:DS (D):10kW:DS
	IRAQ +RADIO BAGHDAD Balad-Salah 'Deen	(D):500kW::ME/AS
	JAPAN NIPPON HOSO KYOKAI Osaka-Mihara	Irr::0.3kW:DS-2
	NIPPON HOSO KYOKAI Sendai-Haramachi	Irr::0.3kW:DS-1
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::EU
	SWITZERLAND SWISS RADIO INTL Schwarzenburg	150kW::WEU
	UNITED KINGDOM BBC Via Maseru, Lesotho	100kW::SAF 100kW:AFRICAN SERVICE:SAF 100kW:WORLD SERVICE:SAF 100kW:WS:SAF
	USA VOICE OF AMERICA Greenville, NC	250kW::CA/SA
	USSR RADIO MOSCOW Nikolayevsk 'Amure	(D):50kW:DS-1:PAC
	+RADIO MOSCOW Nikolayevsk 'Amure	(D):50kW:DS-1:PAC
	RADIO MOSCOW Omsk	(D):100kW:DS-2
	RADIO MOSCOW/RP&P Frunze	100kW::ME
	RADIO TIKHIY OKEAN Nikolayevsk 'Amure	(D):50kW:MARINERS:PAC (D)Sa:50kW:MARINERS:PAC (D)Su-F:50kW:MARINERS:PAC
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EU 100kW::WEU/NAF Su:100kW::EU M-Sa:100kW:ENG,FRENCH,SPANISH:EU
6191.7	PERU RADIO CUZCO Cuzco	1kW:DS-SPANISH,QUECHUA
6195	BANGLADESH RADIO BANGLADESH Dhaka	10/100kW:DS-ENGLISH, ETC
	CANADA CANADIAN BC CORP Sackville, NB	M:100kW:DS-NORTHERN M-F:100kW:DS-NORTHERN Su:100kW:DS-NORTHERN Tu-Sa:100kW:DS-NORTHERN
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::WUSSR
	IRAQ RADIO BAGHDAD	(D):::AM
	NIGERIA RIMA RADIO Sokoto	10kW:DS-ENGLISH, ETC
	UNITED KINGDOM BBC Various Locations	100/250/500kW:WORLD SERVICE, ETC:EU
	BBC Via Antigua	(D):250kW::SA (J):250kW::SA 250kW:WS:AM
(con'd)	BBC Via Masirah, Oman	100kW::SAS

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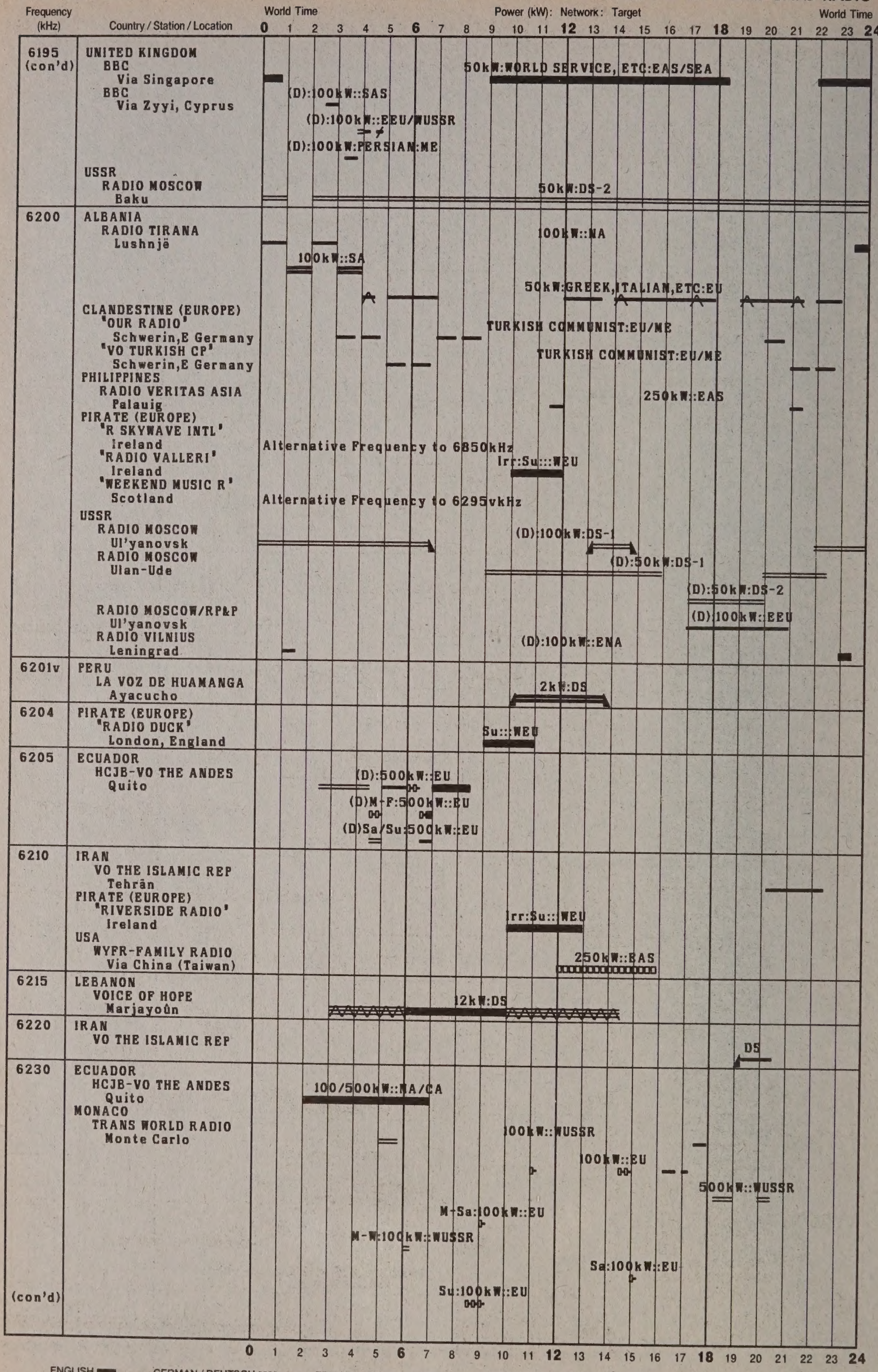
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6195 (con'd)	UNITED KINGDOM BBC Via Singapore	50kW:WORLD SERVICE, ETC:EAS/SEA
	BBC Via Zyyi, Cyprus	(D):100kW::SAS (D):100kW::EEU/WUSSR (D):100kW:PERSIAN:ME
	USSR RADIO MOSCOW Baku	50kW:DS-2
6200	ALBANIA RADIO TIRANA Lushnjë	100kW::NA 100kW::SA 50kW:GREEK,ITALIAN,ETC:EU
	CLANDESTINE (EUROPE) 'OUR RADIO' Schwerin,E Germany	TURKISH COMMUNIST:EU/ME
	'VO TURKISH CP' Schwerin,E Germany	TURKISH COMMUNIST:EU/ME
	PHILIPPINES RADIO VERITAS ASIA Palauig	250kW::EAS
	PIRATE (EUROPE) 'R SKYWAVE INTL' Ireland	Alternative Frequency to 6850kHz
	'RADIO VALLERI' Ireland	Irr:Su:::WEU
	'WEEKEND MUSIC R' Scotland	Alternative Frequency to 6295vkHz
	USSR RADIO MOSCOW Ul'yanovsk	(D):100kW:DS-1
	RADIO MOSCOW Ulan-Ude	(D):50kW:DS-1
	RADIO MOSCOW/RP&P Ul'yanovsk	(D):50kW:DS-2 (D):100kW::EEU
	RADIO VILNIUS Leningrad	(D):100kW::ENA
6201v	PERU LA VOZ DE HUAMANGA Ayacucho	2kW:DS
6204	PIRATE (EUROPE) 'RADIO DUCK' London, England	Su:::WEU
6205	ECUADOR HCJB-VO THE ANDES Quito	(D):500kW::EU (D)M-F:500kW::EU (D)Sa/Su:500kW::EU
6210	IRAN VO THE ISLAMIC REP Tehrān	
	PIRATE (EUROPE) 'RIVERSIDE RADIO' Ireland	Irr:Su:::WEU
	USA WYFR-FAMILY RADIO Via China (Taiwan)	250kW::EAS
6215	LEBANON VOICE OF HOPE Marjayoûn	12kW:DS
6220	IRAN VO THE ISLAMIC REP	DS
6230	ECUADOR HCJB-VO THE ANDES Quito	100/500kW::NA/CA
	MONACO TRANS WORLD RADIO Monte Carlo	100kW::WUSSR 100kW::EU 500kW::WUSSR M-Sa:100kW::EU M-W:100kW::WUSSR Sa:100kW::EU Su:100kW::EU
(con'd)		

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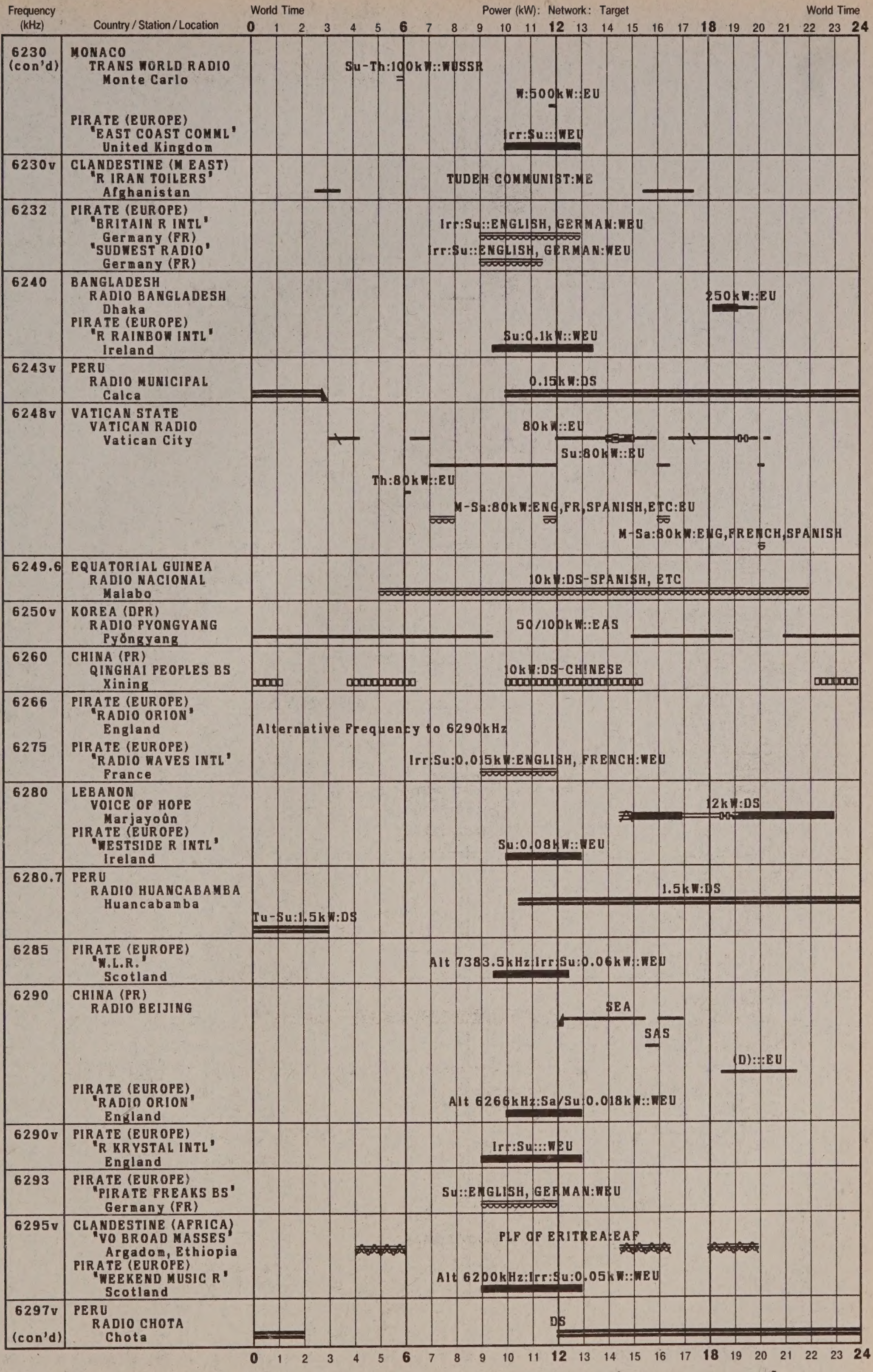

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6230 (con'd)	MONACO TRANS WORLD RADIO Monte Carlo	Su-Th:100kW::WUSSR W:500kW::EU
	PIRATE (EUROPE) 'EAST COAST COMML' United Kingdom	Irr:Su::WEU
6230v	CLANDESTINE (M EAST) 'R IRAN TOILERS' Afghanistan	TUDEH COMMUNIST:ME
6232	PIRATE (EUROPE) 'BRITAIN R INTL' Germany (FR)	Irr:Su::ENGLISH, GERMAN:WEU
	'SUDWEST RADIO' Germany (FR)	Irr:Su::ENGLISH, GERMAN:WEU
6240	BANGLADESH RADIO BANGLADESH Dhaka	250kW::EU
	PIRATE (EUROPE) 'R RAINBOW INTL' Ireland	Su:0.1kW::WEU
6243v	PERU RADIO MUNICIPAL Calca	0.15kW:DS
6248v	VATICAN STATE VATICAN RADIO Vatican City	80kW::EU Su:80kW::EU Th:80kW::EU M-Sa:80kW:ENG,FR,SPANISH,ETC:EU M-Sa:80kW:ENG,FRENCH,SPANISH
6249.6	EQUATORIAL GUINEA RADIO NACIONAL Malabo	10kW:DS-SPANISH, ETC
6250v	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	50/100kW::EAS
6260	CHINA (PR) QINGHAI PEOPLES BS Xining	10kW:DS-CHINESE
6266	PIRATE (EUROPE) 'RADIO ORION' England	Alternative Frequency to 6290kHz
6275	PIRATE (EUROPE) 'RADIO WAVES INTL' France	Irr:Su:0.015kW:ENGLISH, FRENCH:WEU
6280	LEBANON VOICE OF HOPE Marjayoûn	12kW:DS
	PIRATE (EUROPE) 'WESTSIDE R INTL' Ireland	Su:0.08kW::WEU
6280.7	PERU RADIO HUANCABAMBA Huancabamba	1.5kW:DS Tu-Su:1.5kW:DS
6285	PIRATE (EUROPE) 'W.L.R.' Scotland	Alt 7383.5kHz:Irr:Su:0.06kW::WEU
6290	CHINA (PR) RADIO BEIJING	SEA SAS (D):::EU
	PIRATE (EUROPE) 'RADIO ORION' England	Alt 6266kHz:Sa/Su:0.018kW::WEU
6290v	PIRATE (EUROPE) 'R KRYSTAL INTL' England	Irr:Su:::WEU
6293	PIRATE (EUROPE) 'PIRATE FREAKS BS' Germany (FR)	Su::ENGLISH, GERMAN:WEU
6295v	CLANDESTINE (AFRICA) 'VO BROAD MASSES' Argadom, Ethiopia	PLF OF ERITREA:EAF
	PIRATE (EUROPE) 'WEEKEND MUSIC R' Scotland	Alt 6200kHz:Irr:Su:0.05kW::WEU
6297v (con'd)	PERU RADIO CHOTA Chota	DS

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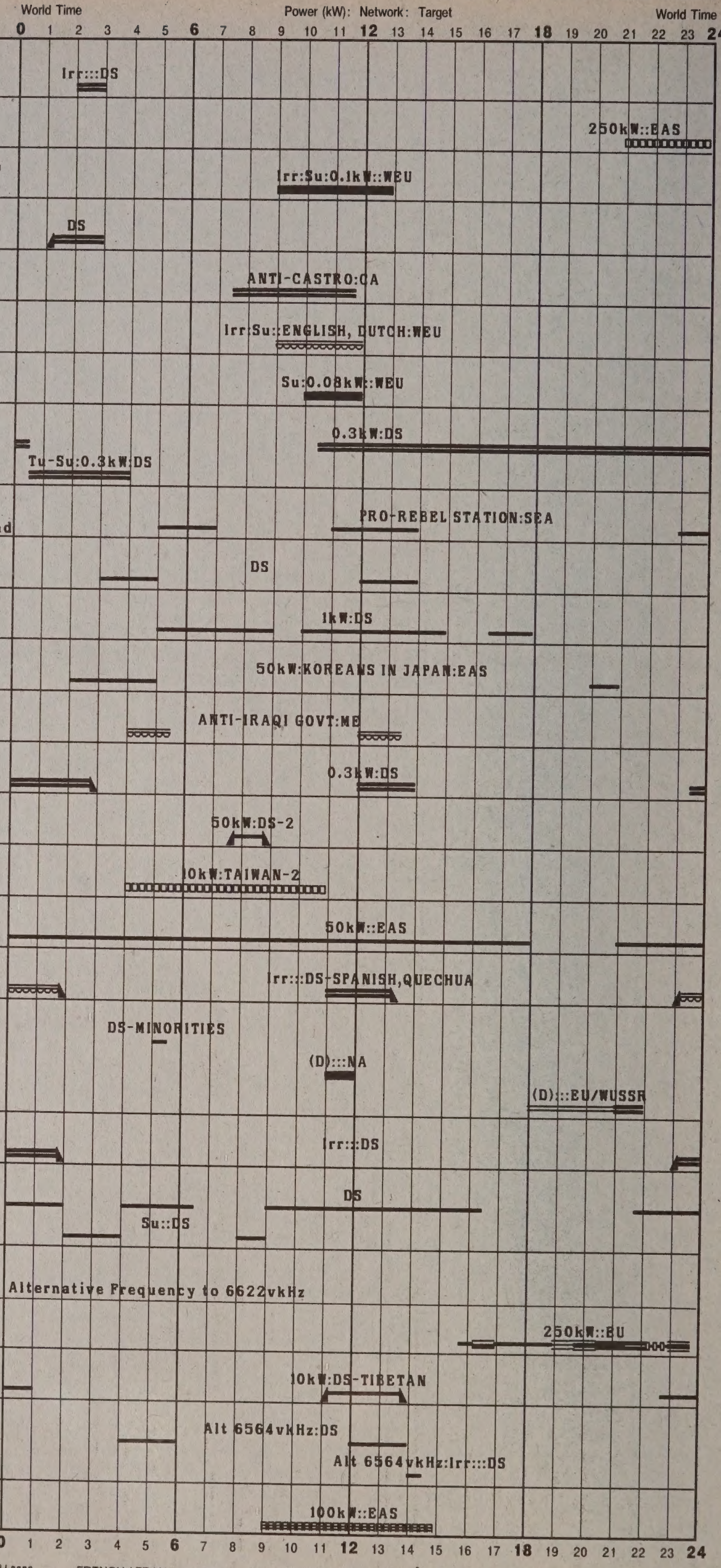

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6297v (con'd)	PERU RADIO CHOTA Chota	Irr:::DS
6300	USA WYFR-FAMILY RADIO Via China (Taiwan)	250kW::EAS
6300v	PIRATE (EUROPE) 'WONDERFUL FREE R' London, England	Irr:Su:0.1kW::WEU
6304v	PERU UNIDENTIFIED	DS
6305	CLANDESTINE (C AMER) 'LA VOZ DEL CID' Guatemala?	ANTI-CASTRO:CA
6305v	PIRATE (EUROPE) 'RADIO BRIGITTE' Belgium	Irr:Su::ENGLISH, DUTCH:WEU
6312	PIRATE (EUROPE) 'R IRELAND INTL' Ireland	Su:0.08kW::WEU
6324v	PERU ESTACION C Moyobamba	0.3kW:DS Tu-Su:0.3kW:DS
6325	CLANDESTINE (ASIA) 'VO THE KHMER' Kampuchea/Thailand	PRO-REBEL STATION:SEA
6330v	VIETNAM SON LA BC STATION Son La	DS
6339.2	TURKEY TURKISH POLICE R Ankara	1kW:DS
6348v	CLANDESTINE (ASIA) 'ECHO OF HOPE' Suwŏn	50kW:KOREANS IN JAPAN:EAS
6355	CLANDESTINE (M EAST) 'IRAQI KURDISTAN' Middle East	ANTI-IRAQI GOVT:ME
6363v	PERU RADIO HUALLAGA Saposoa	0.3kW:DS
6383	MONGOLIA RADIO ULAN BATOR Ulan Bator	50kW:DS-2
6400	CHINA (PR) VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-2
6400v	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	50kW::EAS
6429v	PERU RADIO ESPINAR Yauri	Irr:::DS-SPANISH,QUECHUA
6430	CHINA (PR) CENTRAL PEOPLES BS	DS-MINORITIES
	RADIO BEIJING	(D):::NA (D):::EU/WUSSR
6441v	PERU RADIO HUAYNO Bodega	Irr:::DS
6446v	VIETNAM VOICE OF VIETNAM Hanoi	DS Su::DS
6475v	VIETNAM LAI CHAU BS Lai Chau	Alternative Frequency to 6622vkHz
6480	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	250kW::EU
6500	CHINA (PR) QINGHAI PEOPLES BS Xining	10kW:DS-TIBETAN
6523v	VIETNAM CAO BANG BS Cao Bang	Alt 6564vkHz:DS Alt 6564vkHz:Irr:::DS
6540 (con'd)	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	100kW::EAS

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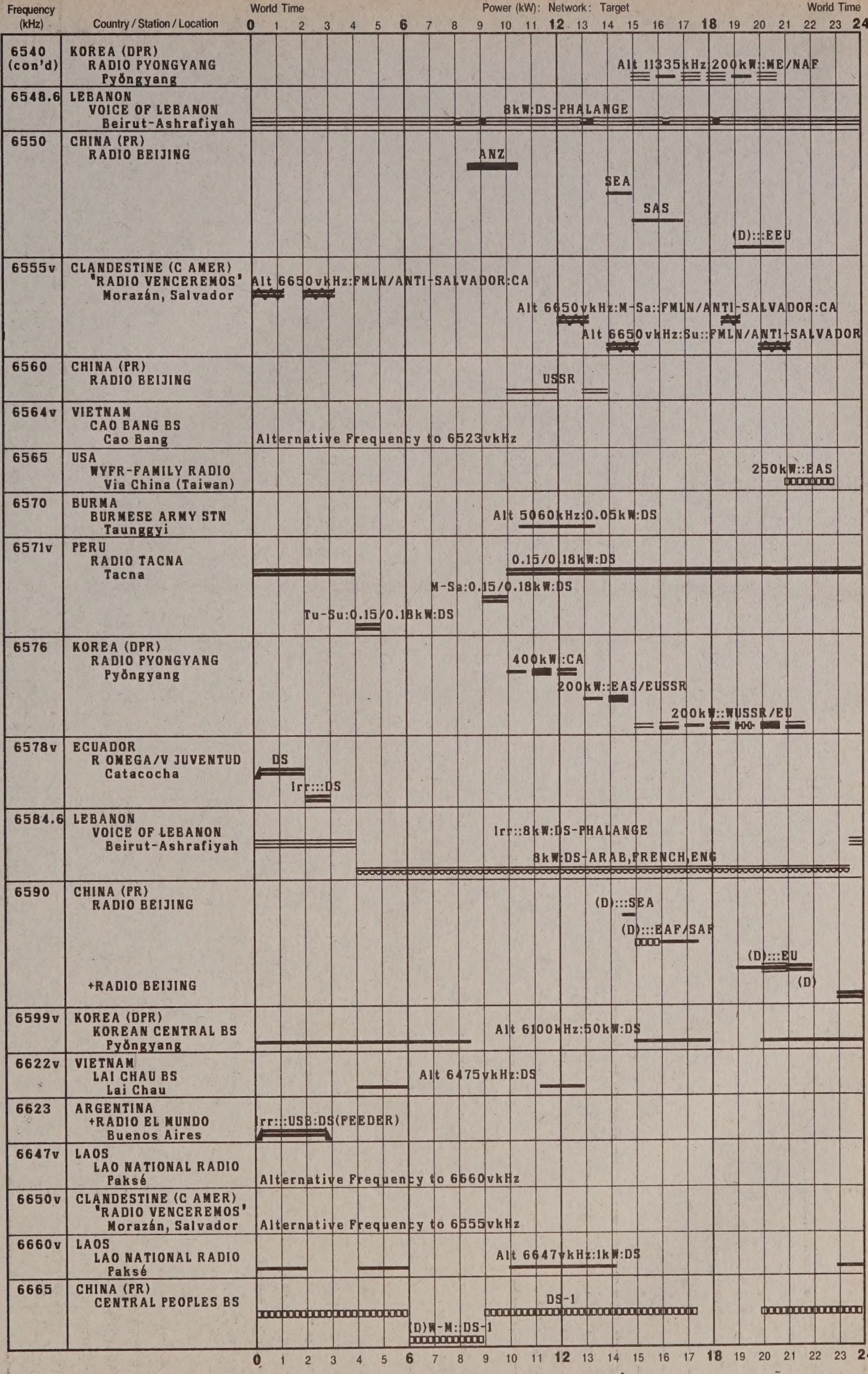

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6540 (con'd)	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	Alt 11335kHz:200kW::ME/NAF
6548.6	LEBANON VOICE OF LEBANON Beirut-Ashrafiyah	8kW:DS-PHALANGE
6550	CHINA (PR) RADIO BEIJING	ANZ SEA SAS (D):::EEU
6555v	CLANDESTINE (C AMER) 'RADIO VENCEREMOS' Morazán, Salvador	Alt 6650vkHz:FMLN/ANTI-SALVADOR:CA Alt 6650vkHz:M-Sa::FMLN/ANTI-SALVADOR:CA Alt 6650vkHz:Su::FMLN/ANTI-SALVADOR
6560	CHINA (PR) RADIO BEIJING	USSR
6564v	VIETNAM CAO BANG BS Cao Bang	Alternative Frequency to 6523vkHz
6565	USA WYFR-FAMILY RADIO Via China (Taiwan)	250kW::EAS
6570	BURMA BURMESE ARMY STN Taunggyi	Alt 5060kHz:0.05kW:DS
6571v	PERU RADIO TACNA Tacna	0.15/0.18kW:DS M-Sa:0.15/0.18kW:DS Tu-Su:0.15/0.18kW:DS
6576	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	400kW::CA 200kW::EAS/EUSSR 200kW::WUSSR/EU
6578v	ECUADOR R OMEGA/V JUVENTUD Catacocha	DS Irr:::DS
6584.6	LEBANON VOICE OF LEBANON Beirut-Ashrafiyah	Irr::8kW:DS-PHALANGE 8kW:DS-ARAB,FRENCH,ENG
6590	CHINA (PR) RADIO BEIJING +RADIO BEIJING	(D):::SEA (D):::EAF/SAF (D):::EU (D)
6599v	KOREA (DPR) KOREAN CENTRAL BS Pyŏngyang	Alt 6100kHz:50kW:DS
6622v	VIETNAM LAI CHAU BS Lai Chau	Alt 6475vkHz:DS
6623	ARGENTINA +RADIO EL MUNDO Buenos Aires	Irr:::USB:DS(FEEDER)
6647v	LAOS LAO NATIONAL RADIO Paksé	Alternative Frequency to 6660vkHz
6650v	CLANDESTINE (C AMER) 'RADIO VENCEREMOS' Morazán, Salvador	Alternative Frequency to 6555vkHz
6660v	LAOS LAO NATIONAL RADIO Paksé	Alt 6647vkHz:1kW:DS
6665	CHINA (PR) CENTRAL PEOPLES BS	DS-1 (D)W-M::DS-1

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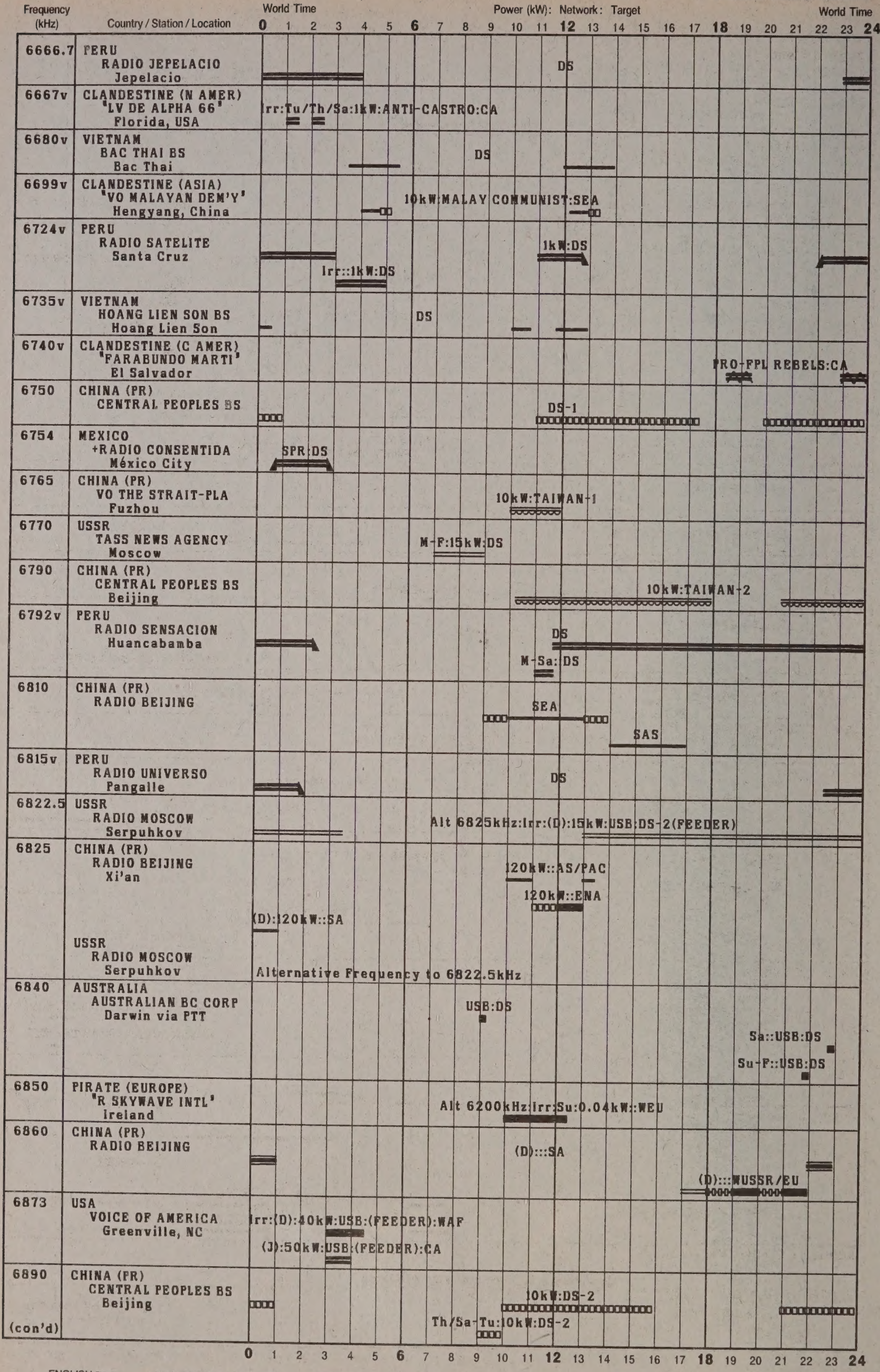

Frequency (kHz)	Country / Station / Location	
6666.7	PERU RADIO JEPELACIO Jepelacio	DS
6667v	CLANDESTINE (N AMER) 'LV DE ALPHA 66' Florida, USA	Irr:Tu/Th/Sa:1kW:ANTI-CASTRO:CA
6680v	VIETNAM BAC THAI BS Bac Thai	DS
6699v	CLANDESTINE (ASIA) 'VO MALAYAN DEM'Y' Hengyang, China	10kW:MALAY COMMUNIST:SEA
6724v	PERU RADIO SATELITE Santa Cruz	1kW:DS Irr::1kW:DS
6735v	VIETNAM HOANG LIEN SON BS Hoang Lien Son	DS
6740v	CLANDESTINE (C AMER) 'FARABUNDO MARTI' El Salvador	PRO-FPL REBELS:CA
6750	CHINA (PR) CENTRAL PEOPLES BS	DS-1
6754	MEXICO +RADIO CONSENTIDA México City	SPR:DS
6765	CHINA (PR) VO THE STRAIT-PLA Fuzhou	10kW:TAIWAN-1
6770	USSR TASS NEWS AGENCY Moscow	M-F:15kW:DS
6790	CHINA (PR) CENTRAL PEOPLES BS Beijing	10kW:TAIWAN-2
6792v	PERU RADIO SENSACION Huancabamba	DS M-Sa: DS
6810	CHINA (PR) RADIO BEIJING	SEA SAS
6815v	PERU RADIO UNIVERSO Pangalle	DS
6822.5	USSR RADIO MOSCOW Serpuhkov	Alt 6825kHz:Irr:(D):15kW:USB:DS-2(FEEDER)
6825	CHINA (PR) RADIO BEIJING Xi'an	120kW::AS/PAC 120kW::ENA (D):120kW::SA
	USSR RADIO MOSCOW Serpuhkov	Alternative Frequency to 6822.5kHz
6840	AUSTRALIA AUSTRALIAN BC CORP Darwin via PTT	USB:DS Sa::USB:DS Su-F::USB:DS
6850	PIRATE (EUROPE) 'R SKYWAVE INTL' Ireland	Alt 6200kHz:Irr:Su:0.04kW::WEU
6860	CHINA (PR) RADIO BEIJING	(D):::SA (D):::WUSSR/EU
6873	USA VOICE OF AMERICA Greenville, NC	Irr:(D):40kW:USB:(FEEDER):WAF (J):50kW:USB:(FEEDER):CA
6890	CHINA (PR) CENTRAL PEOPLES BS Beijing	10kW:DS-2 Th/Sa-Tu:10kW:DS-2
(con'd)		

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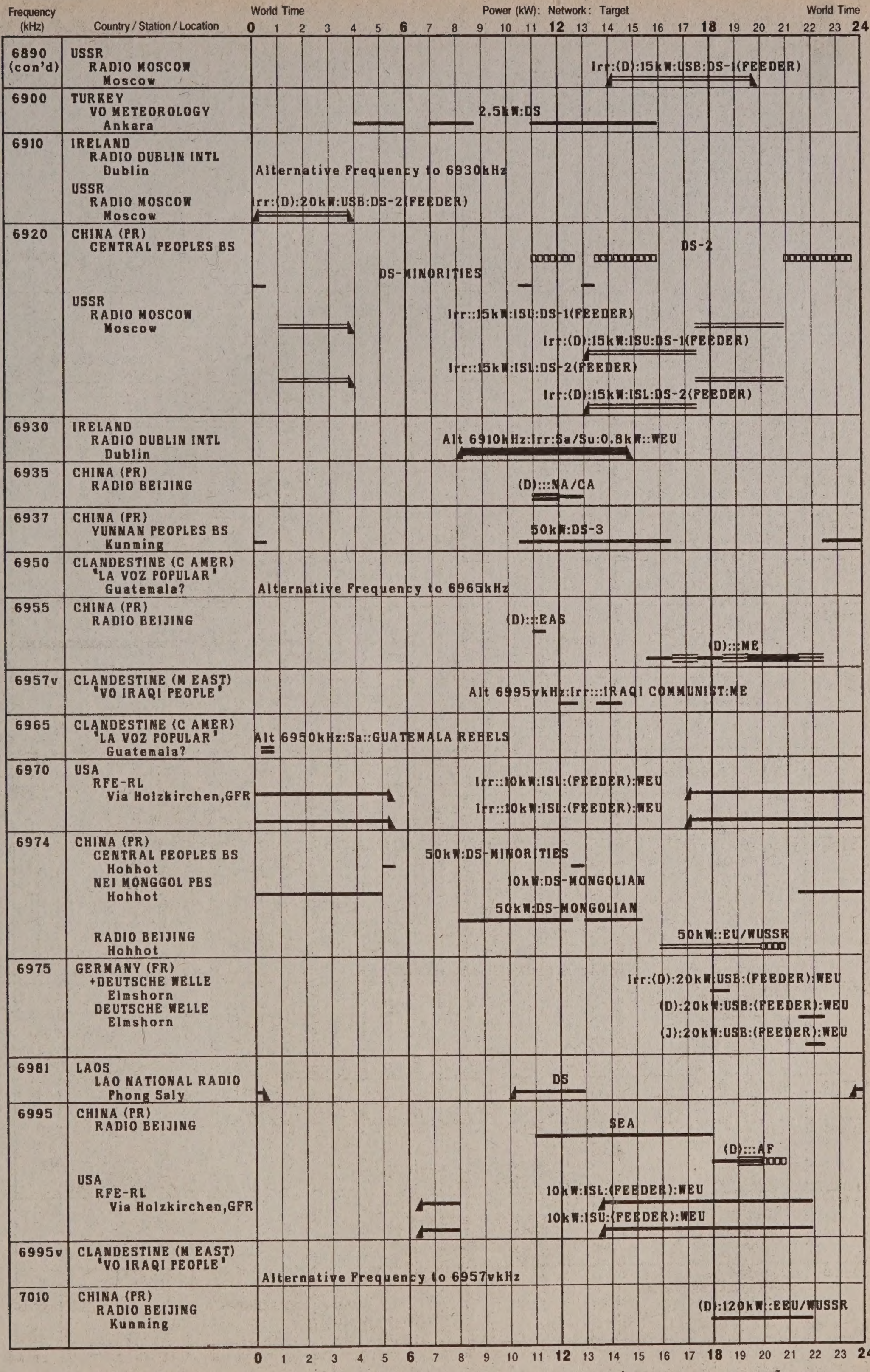

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
6890 (con'd)	USSR RADIO MOSCOW Moscow	Irr:(D):15kW:USB:DS-1(FEEDER)
6900	TURKEY VO METEOROLOGY Ankara	2.5kW:DS
6910	IRELAND RADIO DUBLIN INTL Dublin USSR RADIO MOSCOW Moscow	Alternative Frequency to 6930kHz Irr:(D):20kW:USB:DS-2(FEEDER)
6920	CHINA (PR) CENTRAL PEOPLES BS USSR RADIO MOSCOW Moscow	DS-2 DS-MINORITIES Irr::15kW:ISU:DS-1(FEEDER) Irr:(D):15kW:ISU:DS-1(FEEDER) Irr::15kW:ISL:DS-2(FEEDER) Irr:(D):15kW:ISL:DS-2(FEEDER)
6930	IRELAND RADIO DUBLIN INTL Dublin	Alt 6910kHz:Irr:Sa/Su:0.8kW::WEU
6935	CHINA (PR) RADIO BEIJING	(D):::NA/CA
6937	CHINA (PR) YUNNAN PEOPLES BS Kunming	50kW:DS-3
6950	CLANDESTINE (C AMER) 'LA VOZ POPULAR' Guatemala?	Alternative Frequency to 6965kHz
6955	CHINA (PR) RADIO BEIJING	(D):::EAS (D):::ME
6957v	CLANDESTINE (M EAST) 'VO IRAQI PEOPLE'	Alt 6995vkHz:Irr:::IRAQI COMMUNIST:ME
6965	CLANDESTINE (C AMER) 'LA VOZ POPULAR' Guatemala?	Alt 6950kHz:Sa::GUATEMALA REBELS
6970	USA RFE-RL Via Holzkirchen,GFR	Irr::10kW:ISU:(FEEDER):WEU Irr::10kW:ISL:(FEEDER):WEU
6974	CHINA (PR) CENTRAL PEOPLES BS Hohhot NEI MONGGOL PBS Hohhot RADIO BEIJING Hohhot	50kW:DS-MINORITIES 10kW:DS-MONGOLIAN 50kW:DS-MONGOLIAN 50kW::EU/WUSSR
6975	GERMANY (FR) +DEUTSCHE WELLE Elmshorn DEUTSCHE WELLE Elmshorn	Irr:(D):20kW:USB:(FEEDER):WEU (D):20kW:USB:(FEEDER):WEU (J):20kW:USB:(FEEDER):WEU
6981	LAOS LAO NATIONAL RADIO Phong Saly	DS
6995	CHINA (PR) RADIO BEIJING USA RFE-RL Via Holzkirchen,GFR	SEA (D):::AF 10kW:ISL:(FEEDER):WEU 10kW:ISU:(FEEDER):WEU
6995v	CLANDESTINE (M EAST) 'VO IRAQI PEOPLE'	Alternative Frequency to 6957vkHz
7010	CHINA (PR) RADIO BEIJING Kunming	(D):120kW::EEU/WUSSR

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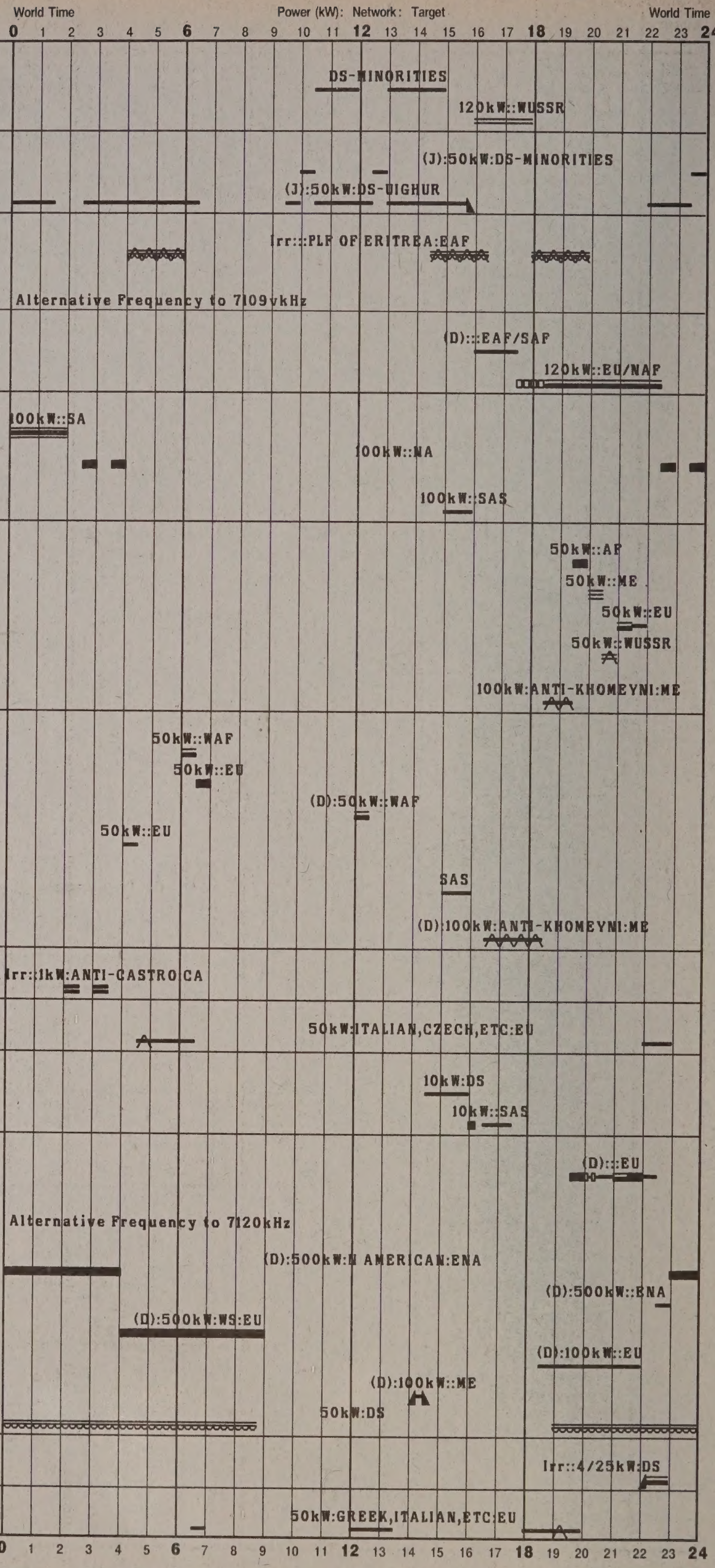

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7035	CHINA (PR)	
	CENTRAL PEOPLES BS Beijing	DS-MINORITIES
	RADIO BEIJING Beijing	120kW::WUSSR
7050	CHINA (PR)	
	CENTRAL PEOPLES BS Urümqi	(J):50kW:DS-MINORITIES
	XINJIANG PBS Urümqi	(J):50kW:DS-UIGHUR
7050v	CLANDESTINE (AFRICA)	
	'VO BROAD MASSES' Argadom, Ethiopia	Irr::PLF OF ERITREA:EAF
	MOZAMBIQUE	
	EP DA ZAMBEZIA Quelimane	Alternative Frequency to 7109vkHz
7055	CHINA (PR)	
	RADIO BEIJING	(D):::EAF/SAF
	RADIO BEIJING Xi'an	120kW::EU/NAF
7065	ALBANIA	
	RADIO TIRANA Lushnjë	100kW::SA 100kW::NA
	CHINA (PR)	
	RADIO BEIJING Beijing	100kW::SAS
7075	ALBANIA	
	RADIO TIRANA Krujë	50kW::AF 50kW::ME 50kW::EU
	RADIO TIRANA Lushnjë	50kW::WUSSR
	CLANDESTINE (M EAST)	
	'RADIO IRAN' Abu Za'bal, Egypt	100kW:ANTI-KHOMEYNI:ME
7080	ALBANIA	
	RADIO TIRANA Krujë	50kW::WAF 50kW::EU
	+RADIO TIRANA Krujë	(D):50kW::WAF
	RADIO TIRANA Lushnjë	50kW::EU
	CHINA (PR)	
	RADIO BEIJING	SAS
	CLANDESTINE (M EAST)	
	'IRAN FREEDOM FLAG Abu Za'bal, Egypt	(D):100kW:ANTI-KHOMEYNI:ME
7080v	CLANDESTINE (C AMER)	
	'ANTORCHA MARTIANA Florida, USA	Irr::1kW:ANTI-CASTRO:CA
7090	ALBANIA	
	RADIO TIRANA Lushnjë	50kW:ITALIAN,CZECH,ETC:EU
7090v	PAKISTAN	
	PAKISTAN BC CORP Islamabad	10kW:DS
	RADIO PAKISTAN Islamabad	10kW::SAS
7100	BULGARIA	
	RADIO SOFIA	(D):::EU
	CHAD	
	RADIODIF NATIONALE N'Djaména	Alternative Frequency to 7120kHz
	USSR	
	RADIO MOSCOW/RP&P Nikolayev	(D):500kW:N AMERICAN:ENA (D):500kW::ENA (D):500kW:WS:EU
	+RADIO MOSCOW/RP&P Sverdlovsk	(D):100kW::EU
	+RADIO MOSCOW/RP&P Tula	(D):100kW::ME
	YAKUT RADIO Yakutsk	50kW:DS
7103	CONGO	
	RTV CONGOLAISE Brazzaville	Irr::4/25kW:DS
7105 (con'd)	ALBANIA	
	RADIO TIRANA Lushnjë	50kW:GREEK,ITALIAN,ETC:EU

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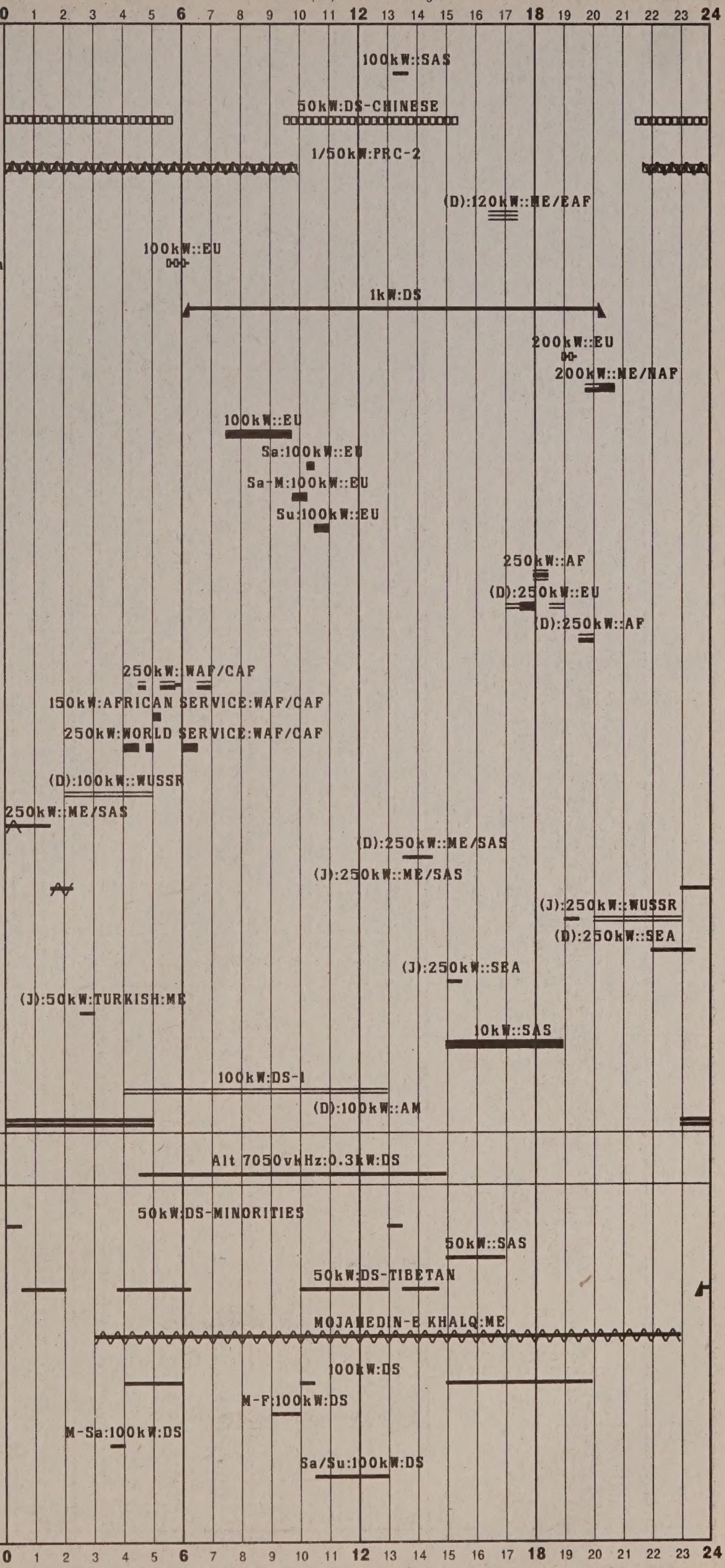

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7105 (con'd)	**BANGLADESH** RADIO BANGLADESH Dhaka	100kW::SAS
	CHINA (PR) NEI MONGGOL PBS Hohhot	50kW:DS-CHINESE
	CHINA (TAIWAN) CENTRAL BC SYSTEM T'ai-pei	1/50kW:PRC-2
	CZECHOSLOVAKIA RADIO PRAGUE Prague	(D):120kW::ME/EAF
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	100kW::EU
	ITALY RADIO TIME-IBC Scandicci	1kW:DS
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	200kW::EU 200kW::ME/NAF
	MONACO TRANS WORLD RADIO Monte Carlo	100kW::EU Sa:100kW::EU Sa-M:100kW::EU Su:100kW::EU
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AF (D):250kW::EU (D):250kW::AF
	UNITED KINGDOM BBC Via Ascension	250kW::WAF/CAF 150kW:AFRICAN SERVICE:WAF/CAF 250kW:WORLD SERVICE:WAF/CAF
	USA VOICE OF AMERICA Via Ismaning, GFR	(D):100kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	250kW::ME/SAS (D):250kW::ME/SAS (J):250kW::ME/SAS (J):250kW::WUSSR
	VOICE OF AMERICA Via Philippines	(D):250kW::SEA (J):250kW::SEA
	VOICE OF AMERICA Via Rhodes, Greece	(J):50kW:TURKISH:ME
	VOICE OF AMERICA Via Sri Lanka	10kW::SAS
	USSR RADIO MOSCOW Serpuhkov	100kW:DS-1
	RADIO MOSCOW Simferopol'	(D):100kW::AM
7109v	**MOZAMBIQUE** EP DA ZAMBEZIA Quelimane	Alt 7050vkHz:0.3kW:DS
7110	**CHINA (PR)** CENTRAL PEOPLES BS Lhasa	50kW:DS-MINORITIES
	RADIO BEIJING Lhasa	50kW::SAS
	XIZANG PEOPLES BS Lhasa	50kW:DS-TIBETAN
	CLANDESTINE (M EAST) 'VO THE CRUSADER' Eastern Iraq	MOJAHEDIN-E KHALQ:ME
	ETHIOPIA VO REV ETHIOPIA Bantu Liben	100kW:DS M-F:100kW:DS M-Sa:100kW:DS Sa/Su:100kW:DS
(con'd)		

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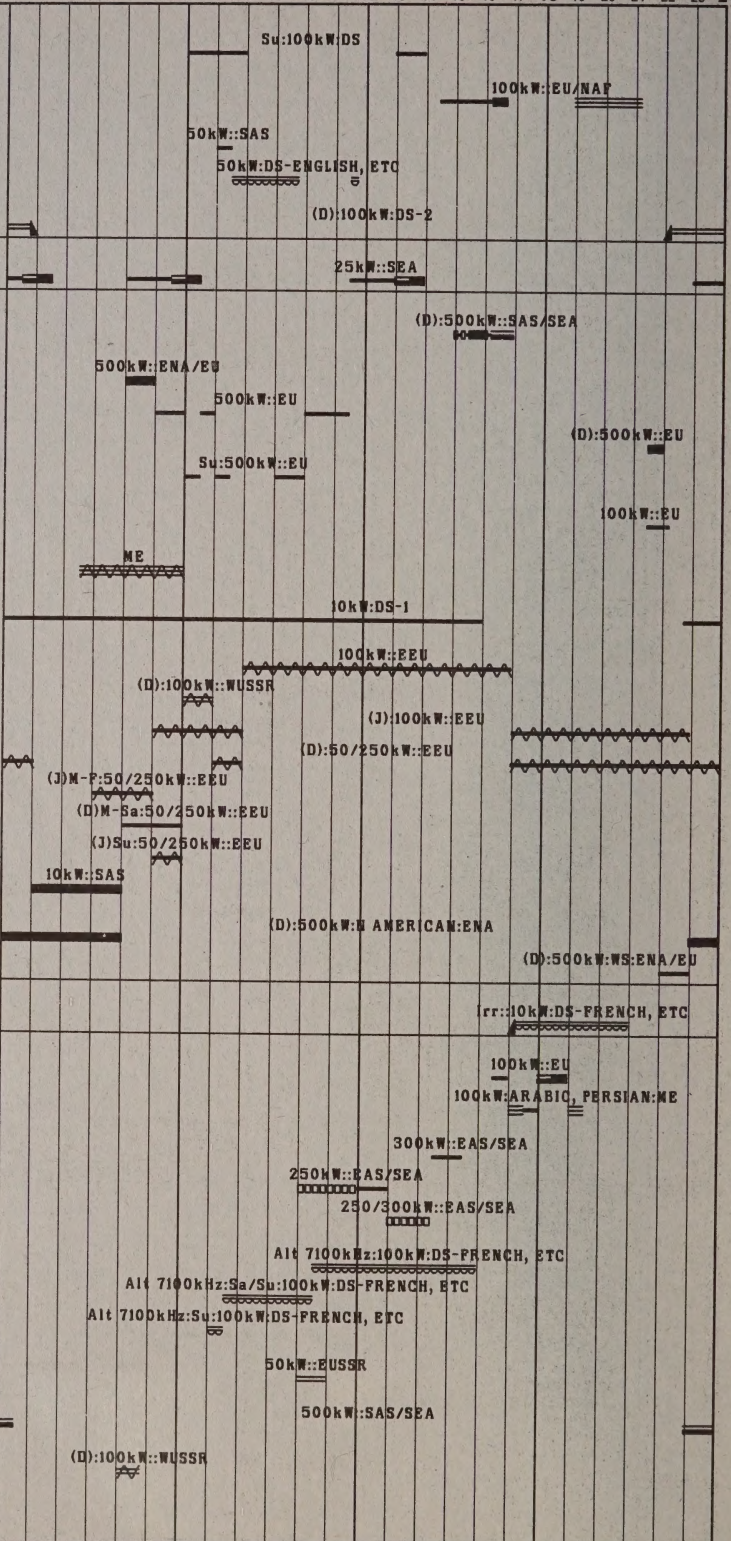
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7110 (con'd)	ETHIOPIA VO REV ETHIOPIA Bantu Liben	Su:100kW:DS
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::EU/NAF
	INDIA ALL INDIA RADIO Delhi	50kW::SAS 50kW:DS-ENGLISH, ETC
	USSR RADIO MOSCOW Omsk	(D):100kW:DS-2
7113v	LAOS LAO NATIONAL RADIO Vientiane	25kW::SEA
7115	AUSTRIA RADIO AUSTRIA INTL Vienna	(D):500kW::SAS/SEA
	BULGARIA RADIO SOFIA Plovdiv	500kW::ENA/EU 500kW::EU (D):500kW::EU Su:500kW::EU
	GERMANY (DR) RADIO BERLIN INTL Leipzig	100kW::EU
	IRAN VO THE ISLAMIC REP Tehrān	ME
	THAILAND RADIO THAILAND Pathum Thani	10kW:DS-1
	USA RFE-RL Via Germany (FR)	100kW::EEU (D):100kW::WUSSR (J):100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU (J)M-F:50/250kW::EEU (D)M-Sa:50/250kW::EEU (J)Su:50/250kW::EEU
	VOICE OF AMERICA Via Sri Lanka	10kW::SAS
	USSR RADIO MOSCOW/RP&P Via Plovdiv,Bulgaria	(D):500kW:N AMERICAN:ENA (D):500kW:WS:ENA/EU
7119v	ZAIRE LA VOIX DU ZAIRE Bandundu	Irr::10kW:DS-FRENCH, ETC
7120	ALBANIA RADIO TIRANA Lushnjë	100kW::EU 100kW:ARABIC, PERSIAN:ME
	AUSTRALIA RADIO AUSTRALIA Carnarvon	300kW::EAS/SEA
	RADIO AUSTRALIA Darwin	250kW::EAS/SEA
	RADIO AUSTRALIA Multiple Locations	250/300kW::EAS/SEA
	CHAD RADIODIF NATIONALE N'Djaména	Alt 7100kHz:100kW:DS-FRENCH, ETC Alt 7100kHz:Sa/Su:100kW:DS-FRENCH, ETC Alt 7100kHz:Su:100kW:DS-FRENCH, ETC
	CHINA (PR) RADIO BEIJING Hohhot	50kW::EUSSR
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	500kW::SAS/SEA
(con'd)	GERMANY (FR) +DEUTSCHE WELLE Jülich	(D):100kW::WUSSR

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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ = CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
7120 (con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::WEU
	INDIA ALL INDIA RADIO Delhi	100kW::EAS/AF/ME
	IRAQ +RADIO BAGHDAD Balad-Salah 'Deen	(D):500kW::EU
	KUWAIT RADIO KUWAIT Jadādiyah	250kW:DS-MAIN PROGRAM
	SOMALIA RADIO HARGEISA Hargeisa	Alt 11639kHz:10kW:DS-SOMALI,ARABIC
	SWAZILAND TRANS WORLD RADIO Manzini	(J):25/100kW::SAF
	UNITED KINGDOM BBC Holywell-Rampisham	500kW::WUSSR 500kW:WORLD SERVICE:EU
	BBC Via Singapore	250kW:WORLD SERVICE:SEA
	USA VOICE OF AMERICA Via Philippines	250kW::EAS
	VOICE OF AMERICA Via Woofferton, UK	250/300kW::EU/WUSSR
	USSR RADIO MOSCOW Novosibirsk	100kW:DS-2/TO NORTH POLE
	RADIO MOSCOW Simferopol'	(J):100kW:DS-1
	RADIO MOSCOW Tula	50kW:DS-3
7125	NORWAY RADIO NORWAY INTL Kvitsøy	(D)M-Sa:500kW::EU/AF (D)Su:500kW::EU/AF (D)Tu-Su:500kW::EU/AF (D)M:500kW:SPANISH, ETC:EU/AF
	POLAND RADIO POLONIA Warsaw	100kW::EU 100kW::AF
	USA VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::WUSSR
	VOICE OF AMERICA Via Sri Lanka	10kW::SAS
	VOICE OF AMERICA Via Woofferton, UK	300kW:TURKISH:EEU/ME
	USSR +RADIO MOSCOW Yerevan	(D):100kW:DS-1
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	500kW::SAS
7125v	GUINEA RTV GUINEENNE Conakry	100kW:DS-FRENCH, ENGLISH 100kW:DS-FRENCH, ETC M-Sa:100kW:DS-FRENCH, ETC Su:100kW:DS-FRENCH, ETC
7130	CANADA RADIO CANADA INTL Via United Kingdom	(J):300kW::EU (J)M-F:300kW::EU (J)Sa/Su:300kW::EU
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	50/100kW::SEA 50/100kW::EAS
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::EEU 100kW::EAS/SEA (J):100kW::WUSSR
(con'd)		

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ARABIC / عربي RUSSIAN / РУССКИИ CHINESE / 中文 JAPANESE / 日本語 MULTILINGUAL OTHER —

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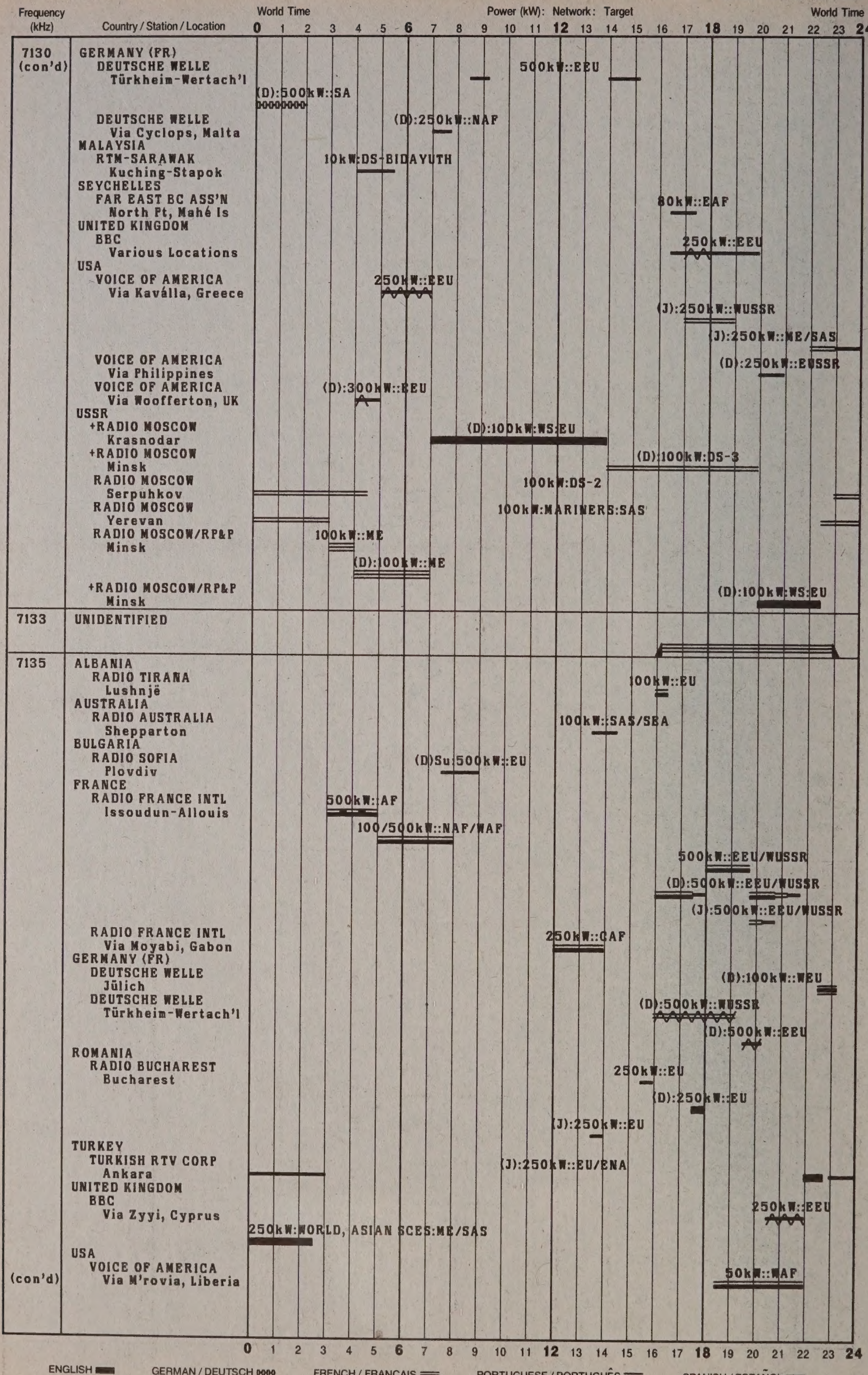

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7130 (con'd)	**GERMANY (FR)** DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EEU (D):500kW::SA
	DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::NAF
	MALAYSIA RTM-SARAWAK Kuching-Stapok	10kW:DS-BIDAYUTH
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::EAF
	UNITED KINGDOM BBC Various Locations	250kW::EEU
	USA VOICE OF AMERICA Via Kavála, Greece	250kW::EEU (J):250kW::WUSSR (J):250kW::ME/SAS
	VOICE OF AMERICA Via Philippines	(D):250kW::EUSSR
	VOICE OF AMERICA Via Woofferton, UK	(D):300kW::EEU
	USSR +RADIO MOSCOW Krasnodar	(D):100kW:WS:EU
	+RADIO MOSCOW Minsk	(D):100kW:DS-3
	RADIO MOSCOW Serpuhkov	100kW:DS-2
	RADIO MOSCOW Yerevan	100kW:MARINERS:SAS
	RADIO MOSCOW/RP&P Minsk	100kW::ME (D):100kW::ME
	+RADIO MOSCOW/RP&P Minsk	(D):100kW:WS:EU
7133	UNIDENTIFIED	
7135	**ALBANIA** RADIO TIRANA Lushnjë	100kW::EU
	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::SAS/SEA
	BULGARIA RADIO SOFIA Plovdiv	(D)Su:500kW::EU
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	500kW::AF 100/500kW::NAF/WAF 500kW::EEU/WUSSR (D):500kW::EEU/WUSSR (J):500kW::EEU/WUSSR
	RADIO FRANCE INTL Via Moyabi, Gabon	250kW::CAF
	GERMANY (FR) DEUTSCHE WELLE Jülich	(D):100kW::WEU
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::WUSSR (D):500kW::EEU
	ROMANIA RADIO BUCHAREST Bucharest	250kW::EU (D):250kW::EU (J):250kW::EU
	TURKEY TURKISH RTV CORP Ankara	(J):250kW::EU/ENA
	UNITED KINGDOM BBC Via Zyyi, Cyprus	250kW::EEU 250kW:WORLD, ASIAN SCES:ME/SAS
(con'd)	**USA** VOICE OF AMERICA Via M'rovia, Liberia	50kW::WAF

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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▤ OTHER —
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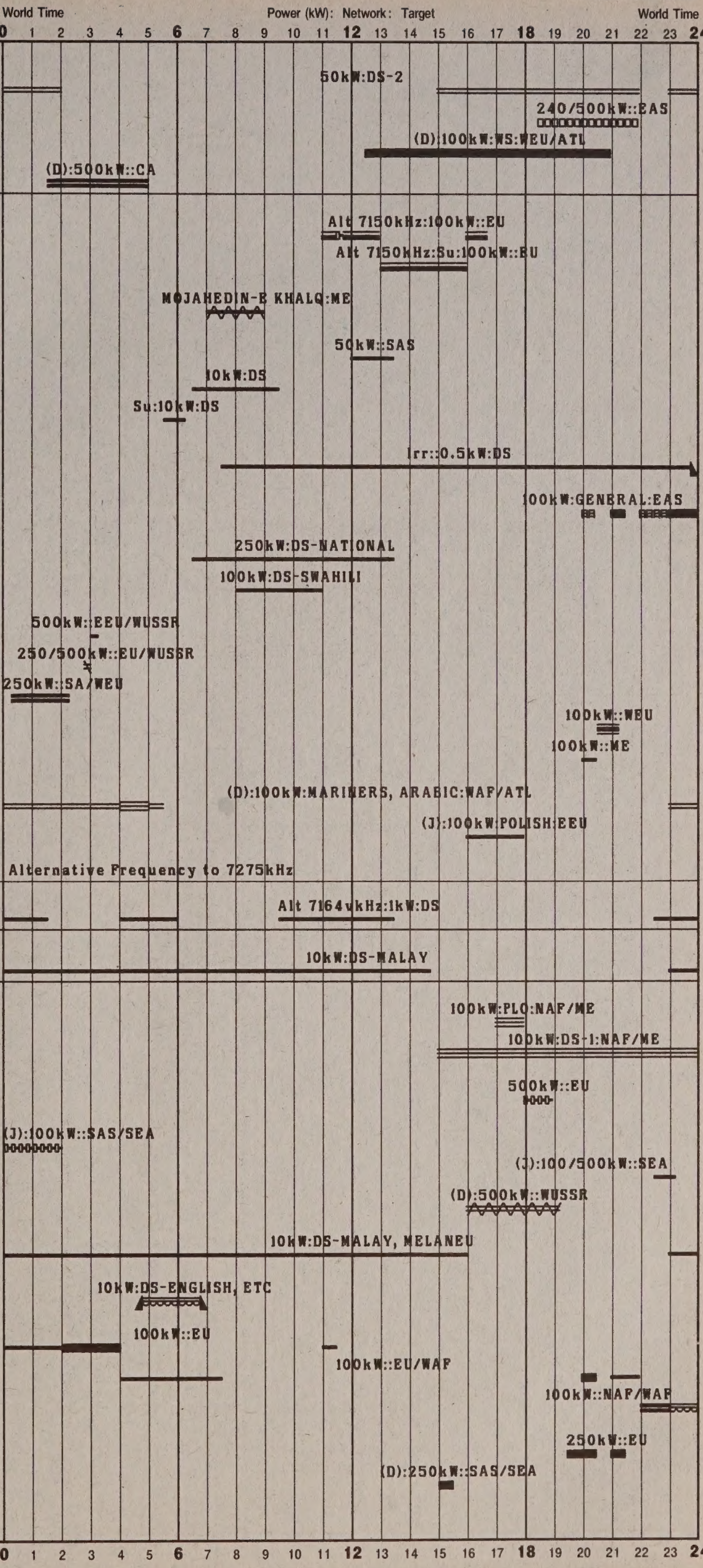

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7135 (con'd)	**USSR**	
	RADIO MOSCOW Novosibirsk	50kW:DS-2
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	240/500kW::EAS
	+RADIO MOSCOW/RP&P Moscow	(D):100kW:WS:WEU/ATL
	RADIO MOSCOW/RP&P Via Plovdiv,Bulgaria	(D):500kW::CA
7140	**BELGIUM**	
	RT BELGE FRANCAISE Wavre	Alt 7150kHz:100kW::EU Alt 7150kHz:Su:100kW::EU
	CLANDESTINE (M EAST)	
	'VO THE CRUSADER' Via Radio Baghdad	MOJAHEDIN-E KHALQ:ME
	INDIA	
	ALL INDIA RADIO Hyderabad	50kW::SAS 10kW:DS Su:10kW:DS
	ITALY	
	RADIO SPOLETO INTL Spoleto	Irr::0.5kW:DS
	JAPAN	
	RADIO JAPAN/NHK Tōkyō-Yamata	100kW:GENERAL:EAS
	KENYA	
	VOICE OF KENYA Nairobi	250kW:DS-NATIONAL 100kW:DS-SWAHILI
	UNITED KINGDOM	
	BBC Holywell-Rampisham	500kW::EEU/WUSSR
	BBC Multiple Locations	250/500kW::EU/WUSSR
	BBC Skelton, Cumbria	250kW::SA/WEU 100kW::WEU
	BBC Via Maşirah, Oman	100kW::ME
	USSR	
	RADIO MOSCOW Armavir	(D):100kW:MARINERS, ARABIC:WAF/ATL
	RADIO MOSCOW/RP&P Kazan'	(J):100kW:POLISH:EEU
	RADIO TASHKENT Tashkent	Alternative Frequency to 7275kHz
7140v	**LAOS**	
	LAO NATIONAL RADIO Luang Prabang	Alt 7164vkHz:1kW:DS
7144v	**MALAYSIA**	
	RTM-SARAWAK Kuching-Stapok	10kW:DS-MALAY
7145	**ALGERIA**	
	'VO PALESTINE' Via RTV Algerienne	100kW:PLO:NAF/ME
	RTV ALGERIENNE Bouchaoui	100kW:DS-1:NAF/ME
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	500kW::EU
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	(J):100kW::SAS/SEA
	DEUTSCHE WELLE Jülich/Türkheim-W'l	(J):100/500kW::SEA
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::WUSSR
	MALAYSIA	
	RTM-SARAWAK Kuching-Stapok	10kW:DS-MALAY, MELANEU
	NIGERIA	
	KWARA STATE BC Ilorin	10kW:DS-ENGLISH, ETC
	POLAND	
	RADIO POLONIA Warsaw	100kW::EU 100kW::EU/WAF 100kW::NAF/WAF
	ROMANIA	
	RADIO BUCHAREST Bucharest	250kW::EU (D):250kW::SAS/SEA
(con'd)		

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ARABIC / عرب ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ═ OTHER —

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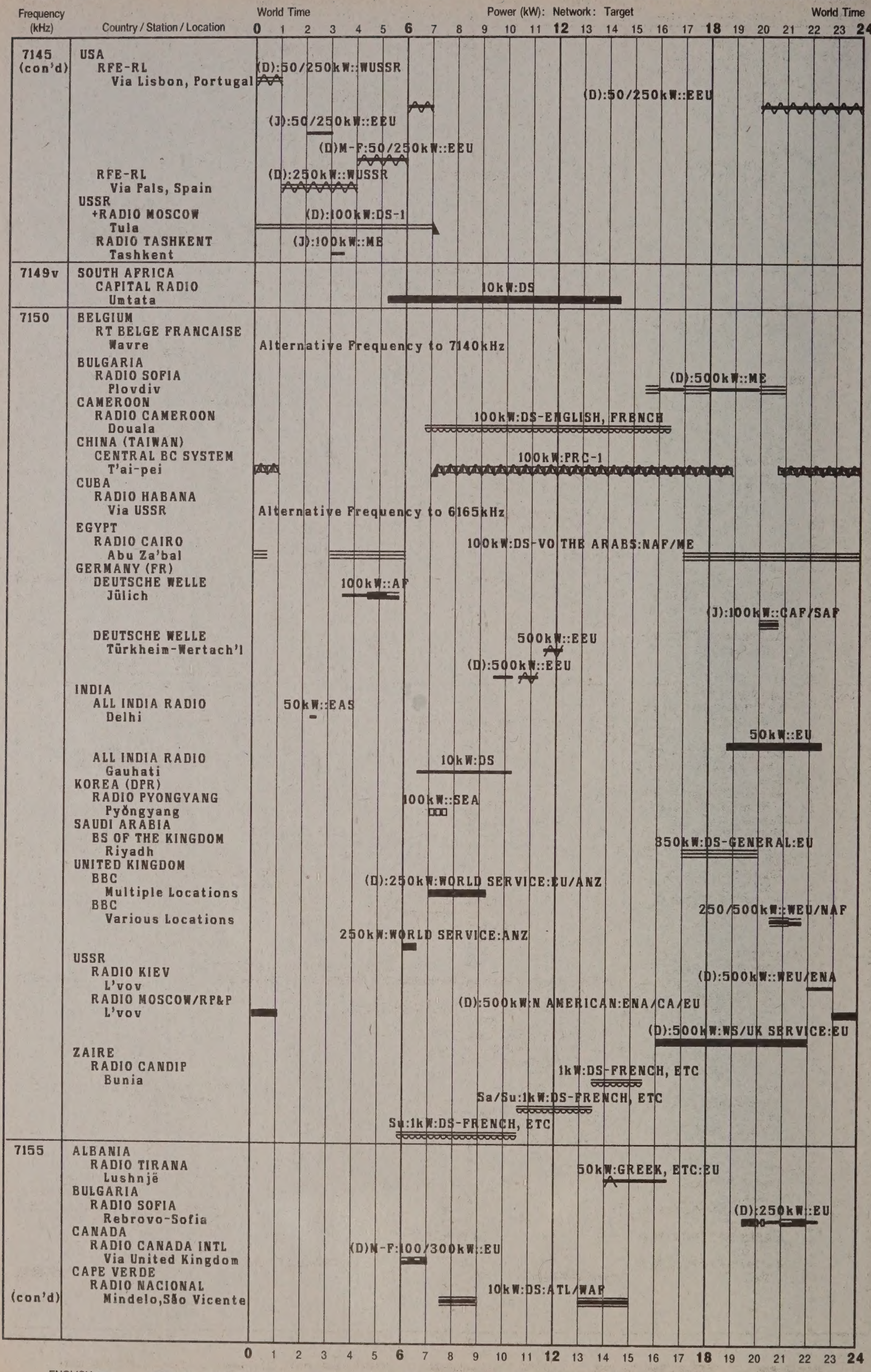

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7145 (con'd)	USA RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR (D):50/250kW::EEU (J):50/250kW::EEU (D)M-F:50/250kW::EEU
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	USSR +RADIO MOSCOW Tula	(D):100kW:DS-1
	RADIO TASHKENT Tashkent	(J):100kW::ME
7149v	SOUTH AFRICA CAPITAL RADIO Umtata	10kW:DS
7150	BELGIUM RT BELGE FRANCAISE Wavre	Alternative Frequency to 7140kHz
	BULGARIA RADIO SOFIA Plovdiv	(D):500kW::ME
	CAMEROON RADIO CAMEROON Douala	100kW:DS-ENGLISH, FRENCH
	CHINA (TAIWAN) CENTRAL BC SYSTEM T'ai-pei	100kW:PRC-1
	CUBA RADIO HABANA Via USSR	Alternative Frequency to 6165kHz
	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-VO THE ARABS:NAF/ME
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::AF (J):100kW::CAF/SAF
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EEU (D):500kW::EEU
	INDIA ALL INDIA RADIO Delhi	50kW::EAS 50kW::EU
	ALL INDIA RADIO Gauhati	10kW:DS
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	100kW::SEA
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:DS-GENERAL:EU
	UNITED KINGDOM BBC Multiple Locations	(D):250kW:WORLD SERVICE:EU/ANZ
	BBC Various Locations	250/500kW::WEU/NAF 250kW:WORLD SERVICE:ANZ
	USSR RADIO KIEV L'vov	(D):500kW::WEU/ENA
	RADIO MOSCOW/RP&P L'vov	(D):500kW:N AMERICAN:ENA/CA/EU (D):500kW:WS/UK SERVICE:EU
	ZAIRE RADIO CANDIP Bunia	1kW:DS-FRENCH, ETC Sa/Su:1kW:DS-FRENCH, ETC Su:1kW:DS-FRENCH, ETC
7155	ALBANIA RADIO TIRANA Lushnjë	50kW:GREEK, ETC:EU
	BULGARIA RADIO SOFIA Rebrovo-Sofia	(D):250kW::EU
	CANADA RADIO CANADA INTL Via United Kingdom	(D)M-F:100/300kW::EU
(con'd)	CAPE VERDE RADIO NACIONAL Mindelo,São Vicente	10kW:DS:ATL/WAF

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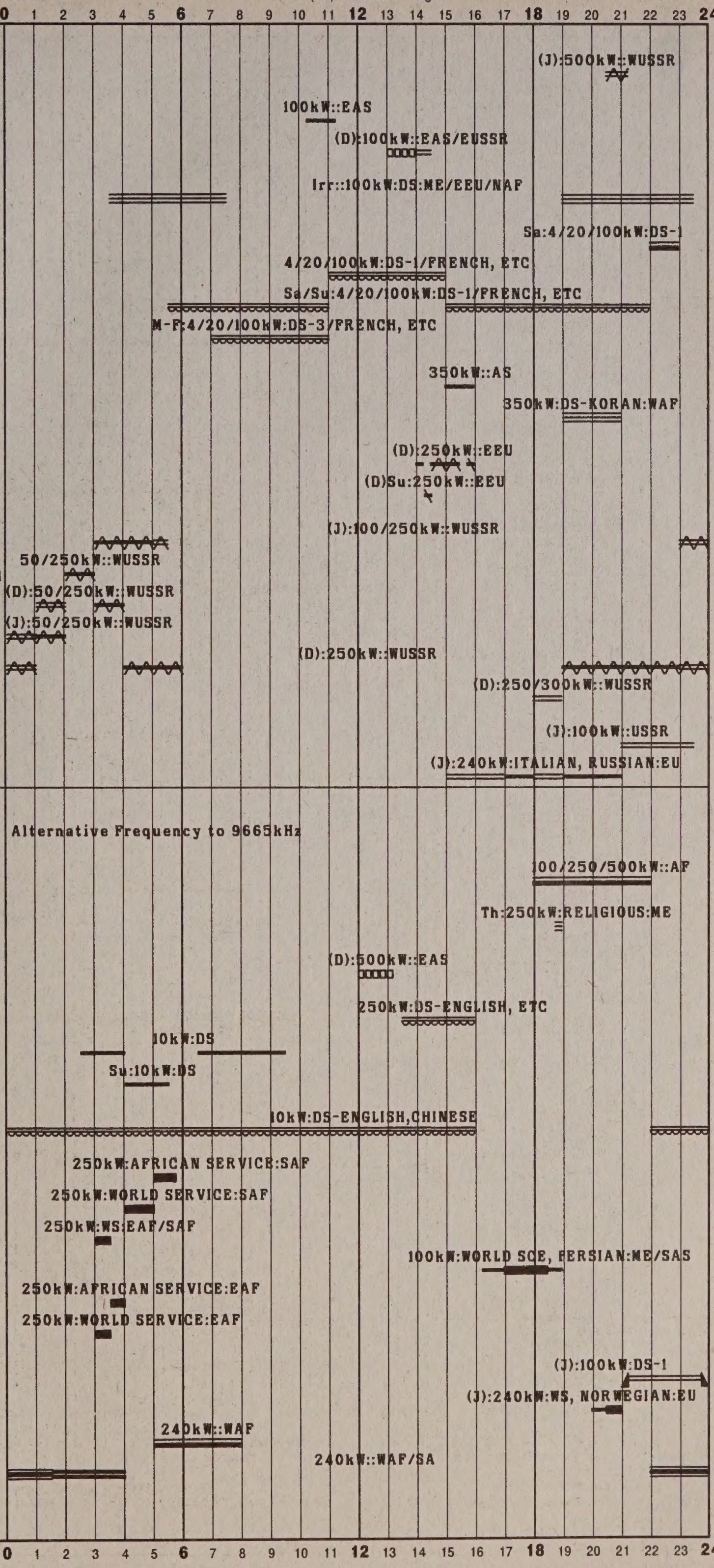
Frequency (kHz) | Country / Station / Location | World Time | Power (kW): Network: Target | World Time

7155 (con'd)

GERMANY (FR)
DEUTSCHE WELLE
Türkheim-Wertach'l
JAPAN
RADIO JAPAN/NHK
Tōkyō-Yamata
JORDAN
RADIO JORDAN
'Amman
NIGER
LA VOIX DU SAHEL
Niamey
SAUDI ARABIA
BS OF THE KINGDOM
Riyadh
UNITED KINGDOM
BBC
Daventry
USA
RFE-RL
Via Germany (FR)
RFE-RL
Via Lisbon, Portugal
RFE-RL
Via Pals, Spain
VOICE OF AMERICA
Via Woofferton, UK
USSR
RADIO MOSCOW/RP&P
Zhigulevsk

7160

AFGHANISTAN
RADIO AFGHANISTAN
Via USSR
FRANCE
RADIO FRANCE INTL
Multiple Locations
GABON
AFRIQUE NUMERO UN
Moanda-Moyabe
GERMANY (FR)
DEUTSCHE WELLE
Türkheim-Wertach'l
INDIA
ALL INDIA RADIO
Aligarh
ALL INDIA RADIO
Madras
MALAYSIA
RTM-SARAWAK
Kuching-Stapok
UNITED KINGDOM
BBC
Via Ascension
BBC
Via Maşirah, Oman
BBC
Via Zyyi, Cyprus
USSR
RADIO MOSCOW
Omsk
RADIO MOSCOW/RP&P
Kazan'
RADIO MOSCOW/RP&P
L'vov
RADIO MOSCOW/RP&P
Tula



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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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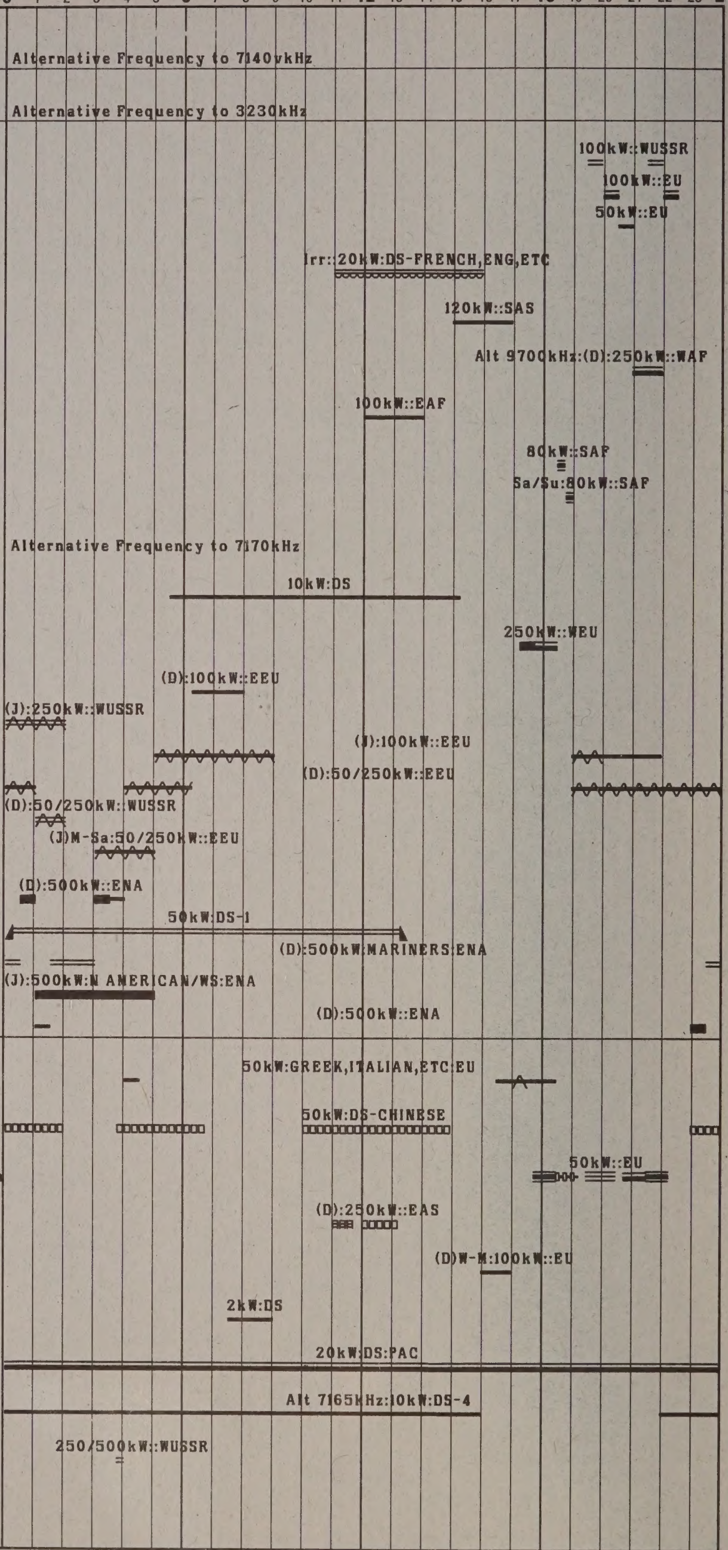

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7164v	LAOS LAO NATIONAL RADIO Luang Prabang	Alternative Frequency to 7140vkHz
7164.5	NEPAL RADIO NEPAL Harriharpur	Alternative Frequency to 3230kHz
7165	ALBANIA RADIO TIRANA Lushnjë	100kW::WUSSR 100kW::EU 50kW::EU
	CAMEROON RADIO CAMEROON Bertoua	Irr::20kW:DS-FRENCH,ENG,ETC
	CHINA (PR) RADIO BEIJING Beijing	120kW::SAS
	CUBA RADIO HABANA Via USSR	Alt 9700kHz:(D):250kW::WAF
	ETHIOPIA VO REV ETHIOPIA Bantu Liben	100kW::EAF
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::SAF Sa/Su:80kW::SAF
	SINGAPORE SINGAPORE BC CORP Jurong	Alternative Frequency to 7170kHz
	TANZANIA RADIO TANZANIA Dar es Salaam	10kW:DS
	UNITED KINGDOM BBC Various Locations	250kW::WEU
	USA RFE-RL Via Germany (FR)	(D):100kW::EEU (J):250kW::WUSSR (J):100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU (D):50/250kW::WUSSR (J)M-Sa:50/250kW::EEU
	USSR RADIO KIEV L'vov	(D):500kW::ENA
	RADIO MOSCOW Serpuhkov	50kW:DS-1
	RADIO MOSCOW/RP&P L'vov	(D):500kW:MARINERS:ENA (J):500kW:N AMERICAN/WS:ENA
	RADIO VILNIUS L'vov	(D):500kW::ENA
7170	ALBANIA RADIO TIRANA Lushnjë	50kW:GREEK,ITALIAN,ETC:EU
	CHINA (PR) XIZANG PEOPLES BS Lhasa	50kW:DS-CHINESE
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	50kW::EU
	GERMANY (FR) DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::EAS
	GREECE FONI TIS HELLADAS Kaválla	(D)W-M:100kW::EU
	INDIA +ALL INDIA RADIO Kohima	2kW:DS
	NEW CALEDONIA RFO-N CALEDONIE Nouméa	20kW:DS:PAC
	SINGAPORE SINGAPORE BC CORP Jurong	Alt 7165kHz:10kW:DS-4
(con'd)	UNITED KINGDOM BBC Various Locations	250/500kW::WUSSR

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7170 (con'd)	USA VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::WUSSR (J):250kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	300kW::NAF (J):300kW::NAF
	USSR RADIO MOSCOW Komsomol'sk 'Amure	(D):100kW::PAC
	RADIO MOSCOW/RP&P Krasnoyarsk	(D):500kW::EAS
	+RADIO MOSCOW/RP&P Krasnoyarsk	(D):500kW::EAS
7172v	ANGOLA ER DO LOBITO Lobito	Irr::1kW:DS 1kW:DS
7173v	SENEGAL ORT DU SENEGAL Dakar	100kW:DS-FRENCH, ETC
7175	AUSTRALIA RADIO AUSTRALIA Darwin	(J):250kW::EAS/SEA
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	500kW::AF
	HOLLAND RADIO NEDERLAND Flevoland	500kW::ME
	ITALY RTV ITALIANA Caltanissetta	50kW:DS-2:EU/NAF
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::ME (D):250kW::WUSSR
	SWEDEN RADIO SWEDEN INTL Hörby	(D):350kW::EAS
	USA VOICE OF AMERICA Via M'rovia, Liberia	M-F:250kW:ENGLISH,FRENCH,ETC:WAF/CAF
	USSR RADIO MOSCOW Star'obel'sk	(J):240kW:MARINERS:EU/ATL
	RADIO MOSCOW Zhigulevsk	(J):100kW:DS-1
	RADIO MOSCOW/RP&P Khabarovsk	(J):100kW::EUSSR
	RADIO MOSCOW/RP&P Novosibirsk	(D):500kW:WS, HAUSA, ETC:WAF
	RS SOV BELORUSSIA Orcha	(J)Su-F:240kW::EU/ATL (J)Sa:240kW:1ST & 3RD SATS:EU/ATL (J)Sa:240kW:2ND & 4TH SATS:EU/ATL
7180	CLANDESTINE (M EAST) 'RADIO IRAN' Via Radio Baghdad	ANTI-KHOMEYNI:ME Irr::ANTI-KHOMEYNI:ME
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::EU/NAF/ME
	TURKEY TURKISH RTV CORP Ankara	(D):250kW::ME
	UNITED KINGDOM BBC Via Singapore	100/250kW::SEA/EAS 100/250kW::SAS
	USA RFE-RL Via Germany (FR)	100kW::WUSSR (D):100kW::WUSSR (D):100kW::EEU (J):100kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	300kW::EEU (D):300kW::EEU
(con'd)		

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ═

ARABIC / عربي ≡ RUSSIAN / РУССКИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
7180 (con'd)	USA VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR
7185	BURMA BURMA BC SERVICE Rangoon	50kW:DS-ENGLISH,BURMESE
	CANADA RADIO CANADA INTL Via United Kingdom	(D):300kW::EU (D)M-F:300kW::EU (D)Sa/Su:300kW::EU
	CHINA (PR) RADIO BEIJING Xi'an	150kW::EAF/SAF
	CLANDESTINE (ASIA) 'VOICE OF THE PLA' Primorskiy K'y,USSR	Irr::FAKE PLA STATION:EAS
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	100kW::EU 50kW::EU
	RADIO BERLIN INTL Nauen	Sa/Su:500kW::EU
	UNITED KINGDOM BBC Multiple Locations	100/250/300kW:WORLD SERVICE:EU/NAF
	USSR RADIO MOSCOW/RP&P Blagoveshchensk	(D):500kW:WS, CHINESE:EAS/SEA
	RADIO MOSCOW/RP&P Novosibirsk	(J):240kW::EAS
7190	BENIN ORT DU BENIN Parakou	20kW:DS-FRENCH, ETC
	CHINA (PR) RADIO BEIJING Kunming	50kW::SEA
	IRAN VO THE ISLAMIC REP Tehrān	500kW::ME
	PHILIPPINES RADIO VERITAS ASIA Palauig	250kW::EAS
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	10kW::SAS Su:10kW::SAS
	USA RFE-RL Via Germany (FR)	100kW::EEU (J):100kW::WUSSR (J):100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR (D):50/250kW::EEU (D)M-Sa:50/250kW::EEU (J)M-Sa:50/250kW::EEU (D)Su:50/250kW::WUSSR
	VOICE OF AMERICA Via Tangier,Morocco	(D):100kW::WUSSR
	YEMEN (PDR) 'VO PALESTINE' Via PDR Yemen BC	100kW:PLO:ME
	PDR YEMEN BC SVC Aden	100kW:DS:ME F:100kW:DS:ME Irr::100kW:DS-RAMADAN:ME
7194.8	CLANDESTINE (C AMER) '15 DE SETIEMBRE' Honduras	Alt 5365.3kHz:Irr::FDN/ANTI-SANDINIST:CA
7195	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::WAF
	DEUTSCHE WELLE Via Sri Lanka	250kW::ME
	PAKISTAN PAKISTAN BC CORP Rawalpindi	10kW:DS Sa-Th:10kW:DS
(con'd)		

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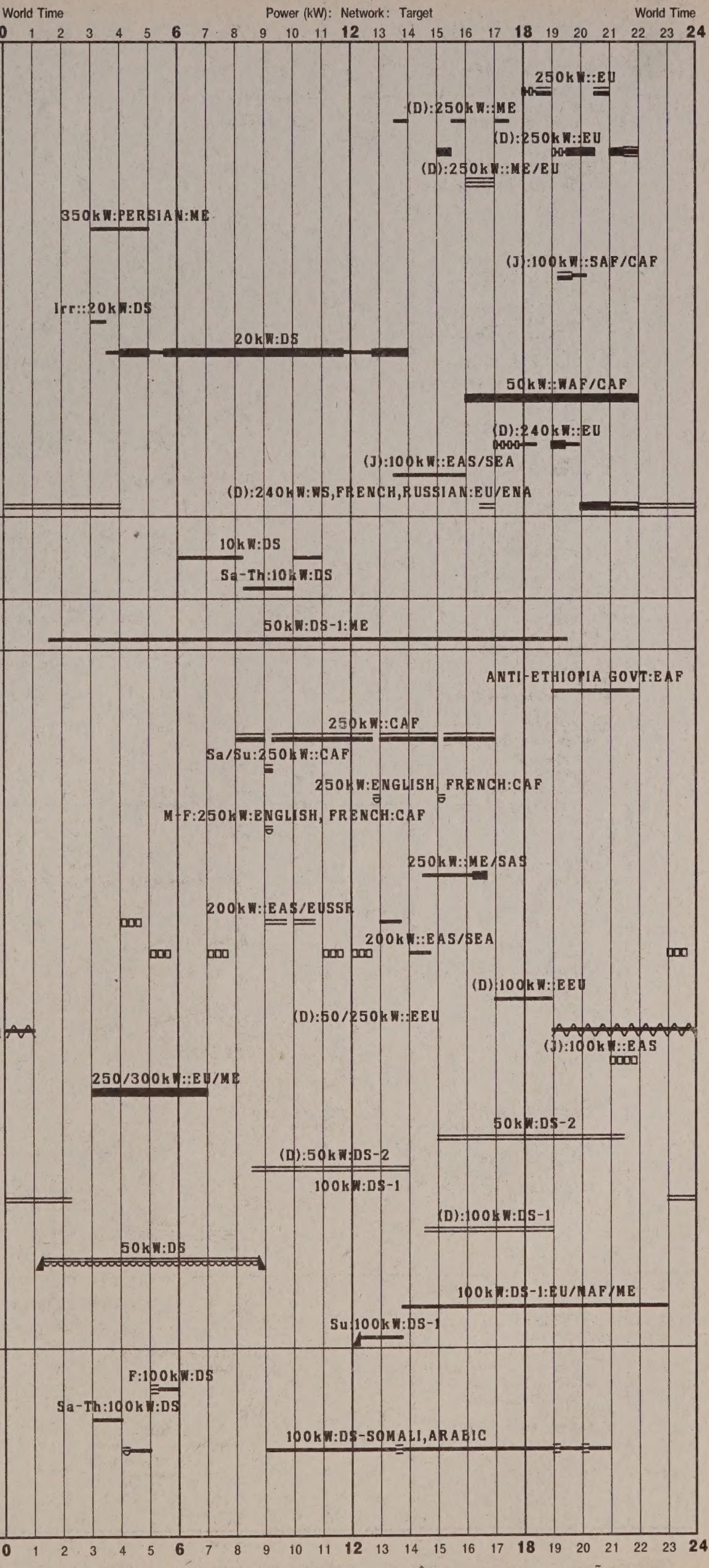
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7195 (con'd)	**ROMANIA** RADIO BUCHAREST Bucharest	250kW::EU (D):250kW::ME (D):250kW::EU (D):250kW::ME/EU
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:PERSIAN:ME
	SWAZILAND TRANS WORLD RADIO Manzini	(J):100kW::SAF/CAF
	UGANDA RADIO UGANDA Kampala	Irr::20kW:DS 20kW:DS
	USA VOICE OF AMERICA Via M'rovia, Liberia	50kW::WAF/CAF
	USSR RADIO KIEV Tula	(D):240kW::EU
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	(J):100kW::EAS/SEA
	RADIO MOSCOW/RP&P Tula	(D):240kW:WS,FRENCH,RUSSIAN:EU/ENA
7195v	**PAKISTAN** PAKISTAN BC CORP Rawalpindi	10kW:DS Sa-Th:10kW:DS
7199v	**AFGHANISTAN** RADIO AFGHANISTAN Kabul	50kW:DS-1:ME
7200	**CLANDESTINE (AFRICA)** *VO ETHIOPIA UNITY Sudan	ANTI-ETHIOPIA GOVT:EAF
	GABON AFRIQUE NUMERO UN Moanda-Moyabe	250kW::CAF Sa/Su:250kW::CAF 250kW:ENGLISH, FRENCH:CAF M-F:250kW:ENGLISH, FRENCH:CAF
	GERMANY (FR) DEUTSCHE WELLE Via Sri Lanka	250kW::ME/SAS
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	200kW::EAS/EUSSR 200kW::EAS/SEA
	USA RFE-RL Via Germany (FR)	(D):100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU
	VOICE OF AMERICA Via Philippines	(J):100kW::EAS
	VOICE OF AMERICA Via Woofferton, UK	250/300kW::EU/ME
	USSR RADIO MOSCOW Vladivostok	50kW:DS-2 (D):50kW:DS-2
	RADIO MOSCOW Zhigulevsk	100kW:DS-1 (D):100kW:DS-1
	YAKUT RADIO Yakutsk	50kW:DS
	YUGOSLAVIA RADIO BEOGRAD Belgrade	100kW:DS-1:EU/NAF/ME Su:100kW:DS-1
7200v	**SOMALIA** RADIO MOGADISHU Mogadishu	F:100kW:DS Sa-Th:100kW:DS 100kW:DS-SOMALI,ARABIC

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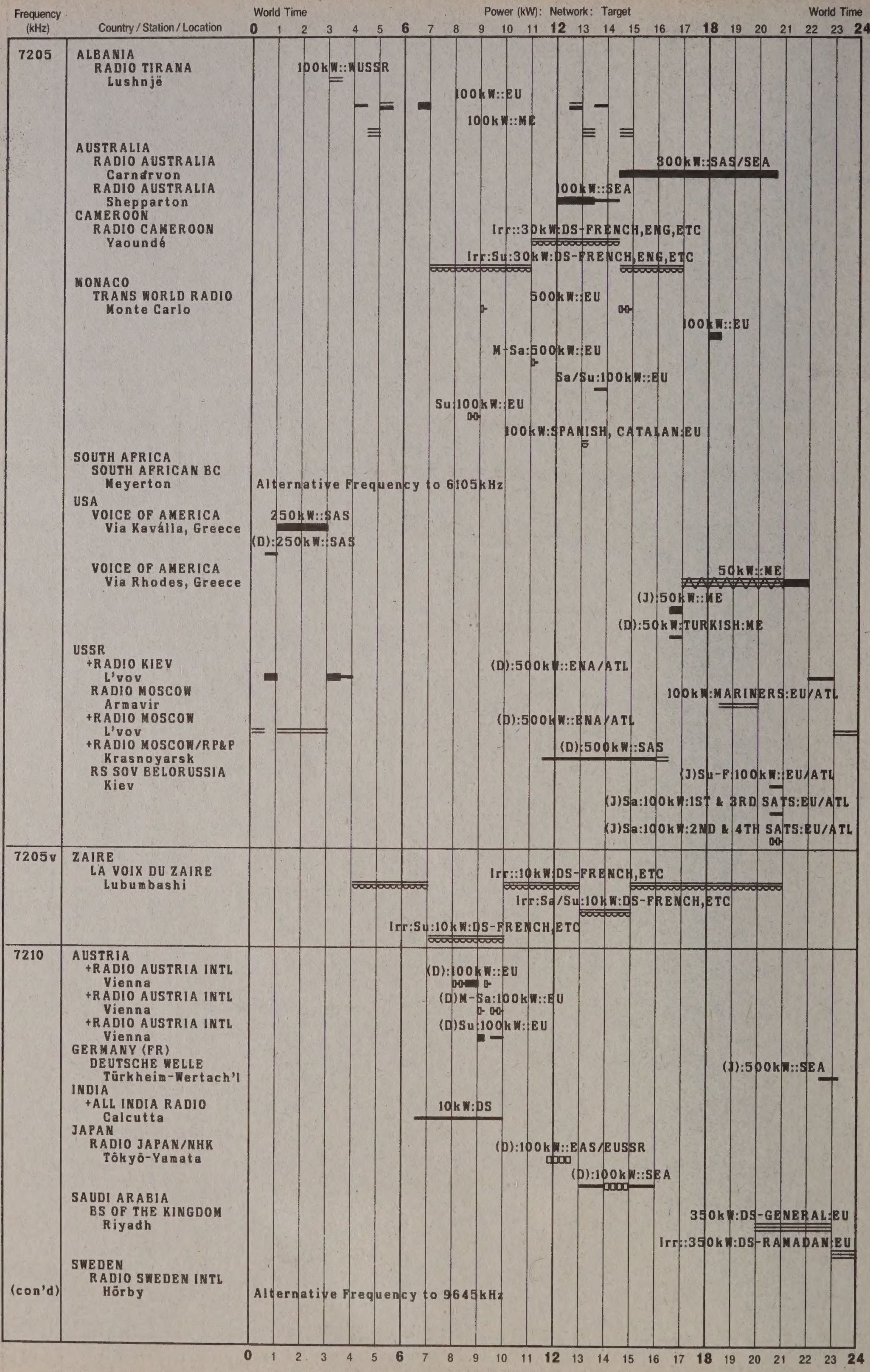
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ═ OTHER ─
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ * TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7205	ALBANIA RADIO TIRANA Lushnjë	100kW::WUSSR 100kW::EU 100kW::ME
	AUSTRALIA RADIO AUSTRALIA Carnarvon	300kW::SAS/SEA
	RADIO AUSTRALIA Shepparton	100kW::SEA
	CAMEROON RADIO CAMEROON Yaoundé	Irr::30kW:DS-FRENCH,ENG,ETC Irr:Su:30kW:DS-FRENCH,ENG,ETC
	MONACO TRANS WORLD RADIO Monte Carlo	500kW::EU 100kW::EU M-Sa:500kW::EU Sa/Su:100kW::EU Su:100kW::EU 100kW:SPANISH, CATALAN:EU
	SOUTH AFRICA SOUTH AFRICAN BC Meyerton	Alternative Frequency to 6105kHz
	USA VOICE OF AMERICA Via Kaválla, Greece	250kW::SAS (D):250kW::SAS
	VOICE OF AMERICA Via Rhodes, Greece	50kW::ME (J):50kW::ME (D):50kW:TURKISH:ME
	USSR +RADIO KIEV L'vov	(D):500kW::ENA/ATL
	RADIO MOSCOW Armavir	100kW:MARINERS:EU/ATL
	+RADIO MOSCOW L'vov	(D):500kW::ENA/ATL
	+RADIO MOSCOW/RP&P Krasnoyarsk	(D):500kW::SAS
	RS SOV BELORUSSIA Kiev	(J)Su-F:100kW::EU/ATL (J)Sa:100kW:1ST & 3RD SATS:EU/ATL (J)Sa:100kW:2ND & 4TH SATS:EU/ATL
7205v	ZAIRE LA VOIX DU ZAIRE Lubumbashi	Irr::10kW:DS-FRENCH,ETC Irr:Sa/Su:10kW:DS-FRENCH,ETC Irr:Su:10kW:DS-FRENCH,ETC
7210	AUSTRIA +RADIO AUSTRIA INTL Vienna	(D):100kW::EU
	+RADIO AUSTRIA INTL Vienna	(D)M-Sa:100kW::EU
	+RADIO AUSTRIA INTL Vienna	(D)Su:100kW::EU
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::SEA
	INDIA +ALL INDIA RADIO Calcutta	10kW:DS
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	(D):100kW::EAS/EUSSR (D):100kW::SEA
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:DS-GENERAL:EU Irr::350kW:DS-RAMADAN:EU
(con'd)	SWEDEN RADIO SWEDEN INTL Hörby	Alternative Frequency to 9645kHz

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Frequency (kHz)	Country / Station / Location	World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 — Power (kW): Network: Target
7210 (con'd)	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:M:150kW:1ST OR LAST MONDAY:EU Irr:Su:150kW:1ST OR LAST SUNDAY:EU/NAF
	UNITED KINGDOM BBC Various Locations	250/500kW::EEU/WUSSR 250kW::WEU/NAF 250/500kW::EEU/ME
	BBC Via Zyyi, Cyprus	250kW:WORLD SERVICE, ETC:EEU
	USA VOICE OF AMERICA Via Kavála, Greece	(J):250kW::SAS
	VOICE OF AMERICA Via Philippines	(D):250kW::EAS
	VOICE OF AMERICA Via Woofferton, UK	(D):250/300kW::EEU/WUSSR
	USSR BELORUSSIAN RADIO Minsk	Alt 12005kHz:15kW:DS-1
	KHABAROVSK RADIO Khabarovsk	50kW:DS-1
	RADIO MOSCOW Moscow	100kW:DS-1 100kW:DS-2
	RADIO TIKHIY OKEAN Khabarovsk	50kW:MARINERS:EUSSR/PAC Sa:50kW:MARINERS:EUSSR/PAC Su-F:50kW:MARINERS:EUSSR/PAC
7210v	CHINA (PR) YUNNAN PEOPLES BS Kunming	50kW:DS-1
	SENEGAL ORT DU SENEGAL Dakar	4kW:DS-FRENCH, ETC
7215	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC
	+RADIO AUSTRALIA Shepparton	(D):100kW::PAC
	CHINA (PR) VOICE OF JINLING Nanjing	PROJECTED:EAS
	CLANDESTINE (M EAST) "FREE VOICE IRAN" Via Radio Baghdad	ANTI-KHOMEYNI:ME
	"VO THE CRUSADER" Via Radio Baghdad	MOJAHEDIN-E KHALQ:ME
	INDIA ALL INDIA RADIO Delhi	100kW::SEA
	IRAN VO THE ISLAMIC REP Tehrān	Irr::500kW:RAMADAN:ME 500kW::ME/NAF 100kW::ME/SAS 500kW::ME
	IVORY COAST RTV IVOIRIENNE Abidjan	20kW:DS:WAF
	NORWAY RADIO NORWAY INTL Kvitsøy	(D):500kW::SAS
	TURKEY TURKISH RTV CORP Ankara	250kW::EU (D):250kW::EU/ENA
	UNITED ARAB EMIRATES +VOICE OF THE UAE Abu Dhabi	Irr::500kW::ME/SAS
	USA RFE-RL Via Lisbon, Portugal	(D)M-Sa:50/250kW::EEU
	USSR +RADIO MOSCOW/RP&P Via Plovdiv,Bulgaria	(D):250kW:N AMERICAN:ENA
7215v	ANGOLA RADIO NACIONAL Luanda	10kW:DS

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▭▭ MULTILINGUAL ≋ OTHER —

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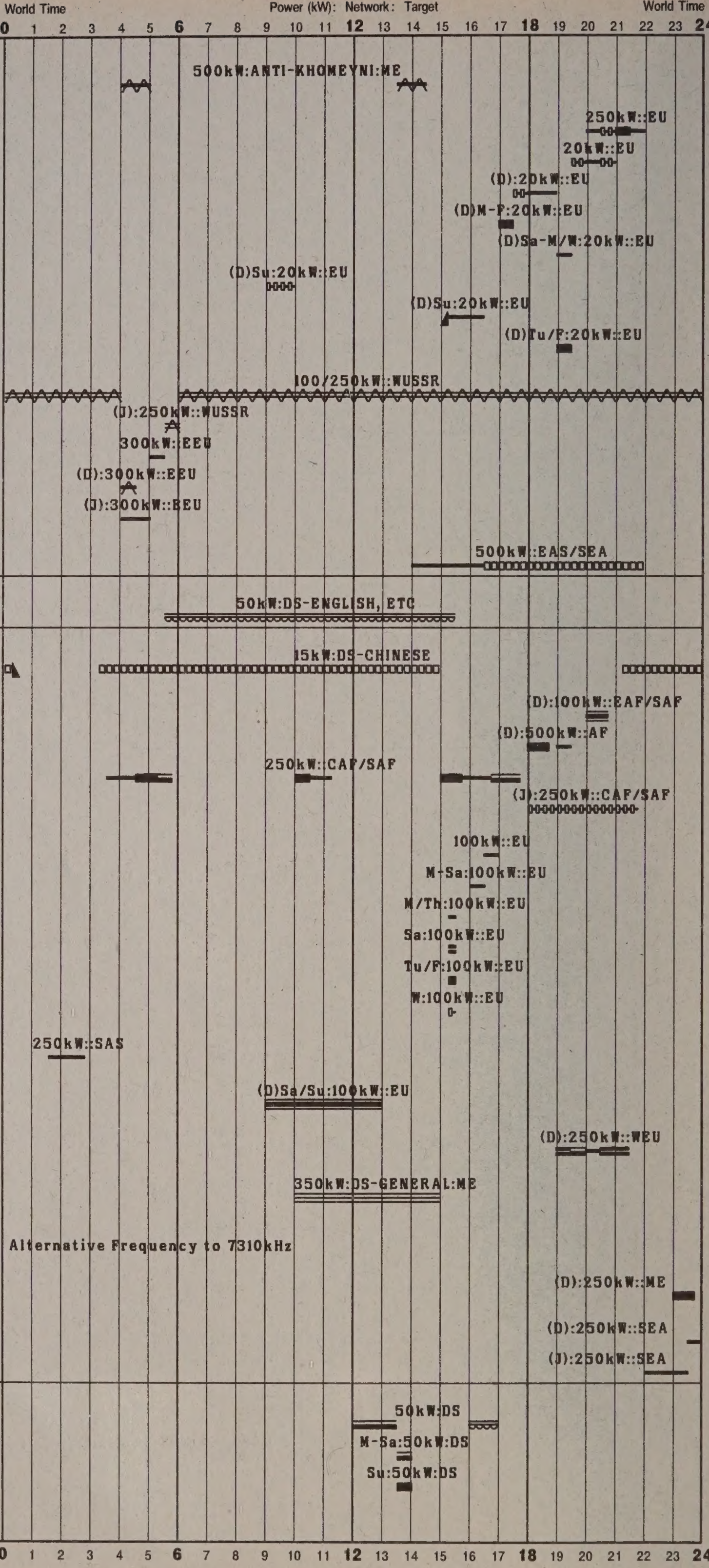

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7220	CLANDESTINE (M EAST) "RADIO IRAN" Via Radio Baghdad	500kW:ANTI-KHOMEYNI:ME
	HUNGARY RADIO BUDAPEST Jászberény	250kW::EU
	RADIO BUDAPEST Szekésfehérvár	20kW::EU
	+RADIO BUDAPEST Szekésfehérvár	(D):20kW::EU
	+RADIO BUDAPEST Szekésfehérvár	(D)M-F:20kW::EU
	+RADIO BUDAPEST Szekésfehérvár	(D)Sa-M/W:20kW::EU
	+RADIO BUDAPEST Szekésfehérvár	(D)Su:20kW::EU
	RADIO BUDAPEST Szekésfehérvár	(D)Su:20kW::EU
	+RADIO BUDAPEST Szekésfehérvár	(D)Tu/F:20kW::EU
	USA RFE-RL Via Germany (FR)	100/250kW::WUSSR (J):250kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	300kW::EEU (D):300kW::EEU (J):300kW::EEU
	USSR RADIO MOSCOW/RP&P Chita	500kW::EAS/SEA
7220v	ZAMBIA RADIO ZAMBIA-ZBS Lusaka	50kW:DS-ENGLISH, ETC
7225	CHINA (PR) SICHUAN PEOPLES BS Chengdu	15kW:DS-CHINESE
	GERMANY (FR) DEUTSCHE WELLE Jülich	(D):100kW::EAF/SAF
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::AF
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::CAF/SAF (J):250kW::CAF/SAF
	HUNGARY RADIO BUDAPEST Erd-Diósd	100kW::EU M-Sa:100kW::EU M/Th:100kW::EU Sa:100kW::EU Tu/F:100kW::EU W:100kW::EU
	INDIA ALL INDIA RADIO Aligarh	250kW::SAS
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	(D)Sa/Su:100kW::EU
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::WEU
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:DS-GENERAL:ME
	TUNISIA RTV TUNISIENNE Sfax	Alternative Frequency to 7310kHz
	TURKEY TURKISH RTV CORP Ankara	(D):250kW::ME
	USA VOICE OF AMERICA Via Philippines	(D):250kW::SEA (J):250kW::SEA
7230	BURKINA FASO RTV BURKINA Ouagadougou	50kW:DS M-Sa:50kW:DS Su:50kW:DS
(con'd)		

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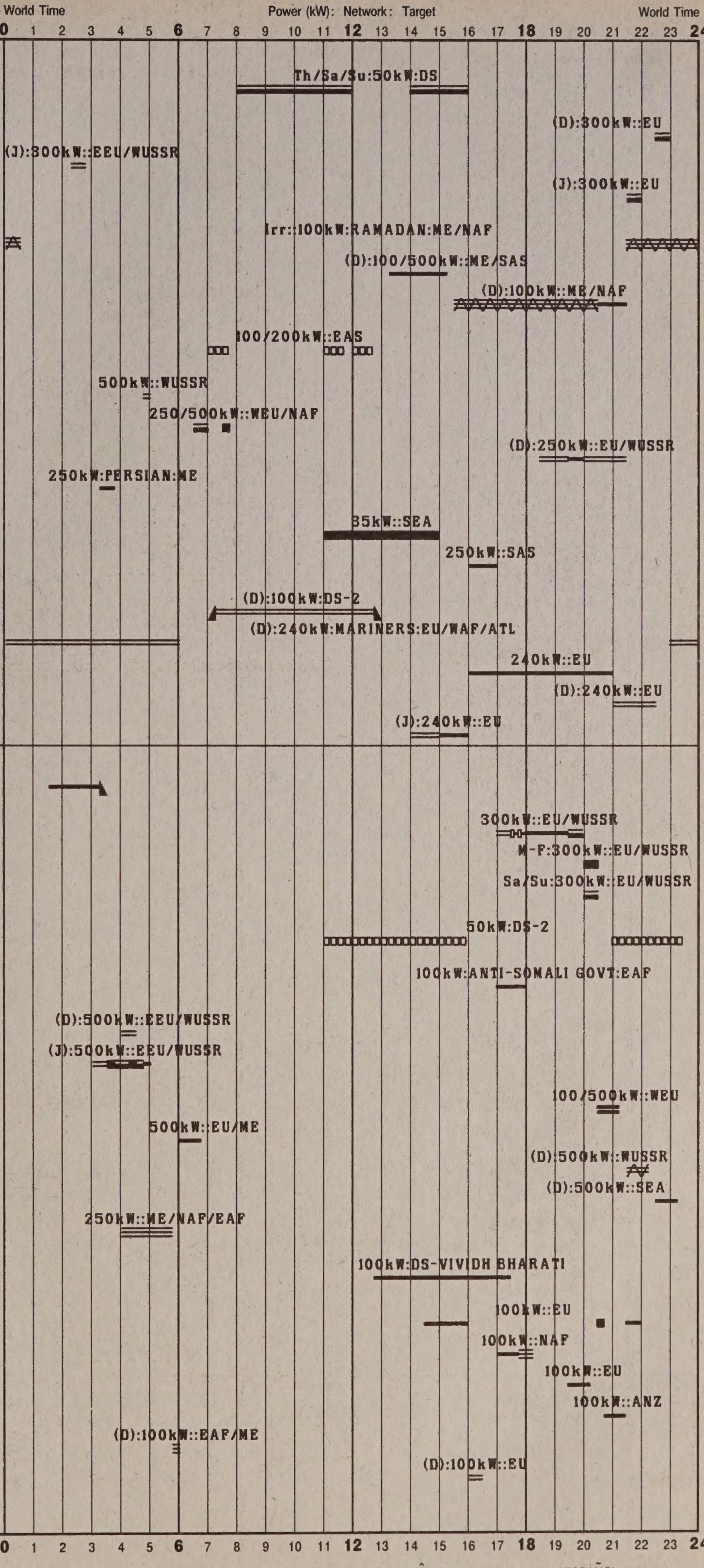

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7230 (con'd)	**BURKINA FASO** RTV BURKINA Ouagadougou	Th/Sa/Su:50kW:DS
	CANADA RADIO CANADA INTL Via United Kingdom	(D):300kW::EU (J):300kW::EEU/WUSSR (J):300kW::EU
	IRAN VO THE ISLAMIC REP Tehrān	Irr::100kW:RAMADAN:ME/NAF (D):100/500kW::ME/SAS (D):100kW::ME/NAF
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	100/200kW::EAS
	UNITED KINGDOM BBC Holywell-Rampisham	500kW::WUSSR
	BBC Various Locations	250/500kW::WEU/NAF
	BBC Via Zyyi, Cyprus	(D):250kW::EU/WUSSR 250kW:PERSIAN:ME
	USA VOICE OF AMERICA Via Philippines	35kW::SEA 250kW::SAS
	USSR RADIO MOSCOW Krasnoyarsk	(D):100kW:DS-2
	RADIO MOSCOW/RP&P Kiev	(D):240kW:MARINERS:EU/WAF/ATL 240kW::EU (D):240kW::EU (J):240kW::EU
7235	**AFGHANISTAN** RADIO AFGHANISTAN Via USSR	
	CANADA RADIO CANADA INTL Via United Kingdom	300kW::EU/WUSSR M-F:300kW::EU/WUSSR Sa/Su:300kW::EU/WUSSR
	CHINA (PR) CENTRAL PEOPLES BS Shijiazhuang	50kW:DS-2
	CLANDESTINE (AFRICA) "RADIO HALGAN" Bantu Liben,Ethi'a	100kW:ANTI-SOMALI GOVT:EAF
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(D):500kW::EEU/WUSSR (J):500kW::EEU/WUSSR
	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	100/500kW::WEU
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EU/ME (D):500kW::WUSSR (D):500kW::SEA
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::ME/NAF/EAF
	INDIA ALL INDIA RADIO Madras	100kW:DS-VIVIDH BHARATI
	ITALY RTV ITALIANA Rome	100kW::EU 100kW::NAF
	+RTV ITALIANA Rome	100kW::EU
	RTV ITALIANA Rome	100kW::ANZ (D):100kW::EAF/ME (D):100kW::EU
(con'd)		

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Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
7235 (con'd)	ITALY RTV ITALIANA Rome	(D):100kW::NAF (D)Su/M:100kW::EAF/ME
	MONGOLIA RADIO ULAN BATOR Ulan Bator	M-Sa:50kW::AS
	NORWAY RADIO NORWAY INTL Fredrikstad	(D):350kW::ME/EAF (D):350kW::WEU/WAF
	RADIO NORWAY INTL Kvitsøy	(D):500kW::ME Alt 9630kHz:(D)M:500kW::ME Alt 9630kHz:(D)Tu-Su:500kW::ME Alt 9630kHz:(D)W-M:500kW::ME Alt 9630kHz:(D)Tu:500kW:SPANISH, ETC:ME
	ROMANIA RADIO BUCHAREST Bucharest	(J):250kW::EU
7235v	ALBANIA RADIO TIRANA Krujë	50kW::EU
	ZAMBIA RADIO ZAMBIA-ZBS Lusaka	50kW:DS-ENGLISH, ETC
7240	CAMEROON RADIO CAMEROON Garoua	100kW:DS-FRENCH,ENG,ETC
	INDIA ALL INDIA RADIO Bombay	10kW:DS
	ALL INDIA RADIO Delhi	50kW:DS
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW:GENERAL:EAS
	KENYA VOICE OF KENYA Nairobi	10kW:DS-EASTERN Su:10kW:DS-EASTERN
	USA VOICE OF AMERICA Via Ismaning, GFR	(J):100kW::WUSSR
	VOICE OF AMERICA Via Philippines	(J)M-F:250kW::EAF
	USSR 'RADIO MAGALLANES' Via Radio Moscow	(D):240kW::SA
	+RADIO MOSCOW Khabarovsk	(D):100kW
	RADIO MOSCOW/RP&P Tula	(D):240kW::SA (D):240kW::EU
	YUGOSLAVIA RADIO KOPER Belgrade	100kW:DS:EU/NAF/ME
	RADIO LJUBLJANA Belgrade	M:100kW:DS-ENGLISH, ETC:EU/NAF
	RADIO YUGOSLAVIA Belgrade	100kW::EU/NAF/ME
	RADIO ZAGREB Belgrade	Th:100kW:DS-MARINERS:ME/EAF
	VARIOUS LOCAL STNS Belgrade	Sa/Su:100kW:DS:EU/NAF/ME Tu-Su:100kW:DS:EU/NAF/ME
7245	ANGOLA RADIO NACIONAL Luanda	100kW::SAF
	AUSTRIA RADIO AUSTRIA INTL Vienna	(D):500kW::EAS (D)M-Sa:500kW::EAS (D)Su:500kW::EAS
	LIBYA RADIO JAMAHIRIYA	500kW:DS/ES
(con'd)	MAURITANIA ORT DE MAURITANIE Nouakchott	Alt 9610kHz:100kW:DS-FRENCH,ARAB,ETC

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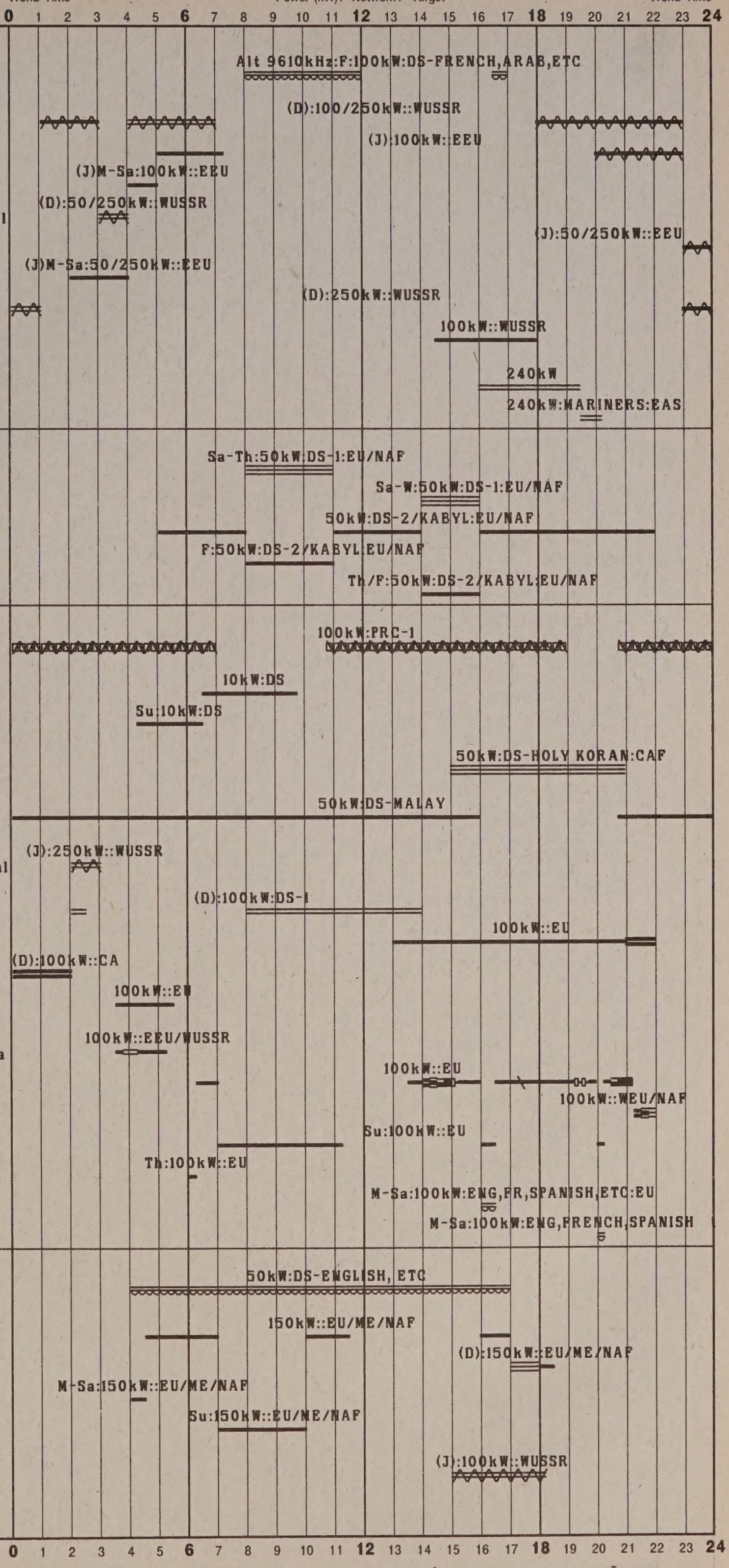
ARABIC / عربي RUSSIAN / РУССКИЙ CHINESE / 中文 JAPANESE / 日本語 MULTILINGUAL OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD LATEST HEARD + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7245 (con'd)	**MAURITANIA** ORT DE MAURITANIE Nouakchott	Alt 9610kHz:F:100kW:DS-FRENCH,ARAB,ETC
	USA RFE-RL Via Germany (FR)	(D):100/250kW::WUSSR (J):100kW::EEU (J)M-Sa:100kW::EEU
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR (J):50/250kW::EEU (J)M-Sa:50/250kW::EEU
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	VOICE OF AMERICA Via Ismaning, GFR	100kW::WUSSR
	USSR RADIO MOSCOW Khabarovsk	240kW
	RADIO TIKHIY OKEAN Khabarovsk	240kW:MARINERS:EAS
7246	**ALGERIA** RTV ALGERIENNE Ouled Fayet	Sa-Th:50kW:DS-1:EU/NAF Sa-W:50kW:DS-1:EU/NAF 50kW:DS-2/KABYL:EU/NAF F:50kW:DS-2/KABYL:EU/NAF Th/F:50kW:DS-2/KABYL:EU/NAF
7250	**CHINA (TAIWAN)** CENTRAL BC SYSTEM T'ai-pei	100kW:PRC-1
	INDIA ALL INDIA RADIO Lucknow	10kW:DS Su:10kW:DS
	SAUDI ARABIA BS OF THE KINGDOM Jiddah	50kW:DS-HOLY KORAN:CAF
	SINGAPORE SINGAPORE BC CORP Jurong	50kW:DS-MALAY
	USA RFE-RL Via Lisbon, Portugal	(J):250kW::WUSSR
	USSR +RADIO MOSCOW Serpuhkov	(D):100kW:DS-1
	RADIO MOSCOW/RP&P Kazan'	100kW::EU
	+RADIO MOSCOW/RP&P Serpuhkov	(D):100kW::CA
	RADIO MOSCOW/RP&P Tula	100kW::EU
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EEU/WUSSR 100kW::EU 100kW::WEU/NAF Su:100kW::EU Th:100kW::EU M-Sa:100kW:ENG,FR,SPANISH,ETC:EU M-Sa:100kW:ENG,FRENCH,SPANISH
7255	**BOTSWANA** RADIO BOTSWANA Gaborone	50kW:DS-ENGLISH, ETC
	BULGARIA RADIO SOFIA Elin Pelin-Stolnik	150kW::EU/ME/NAF (D):150kW::EU/ME/NAF M-Sa:150kW::EU/ME/NAF Su:150kW::EU/ME/NAF
(con'd)	**GERMANY (FR)** DEUTSCHE WELLE Jülich	(J):100kW::WUSSR

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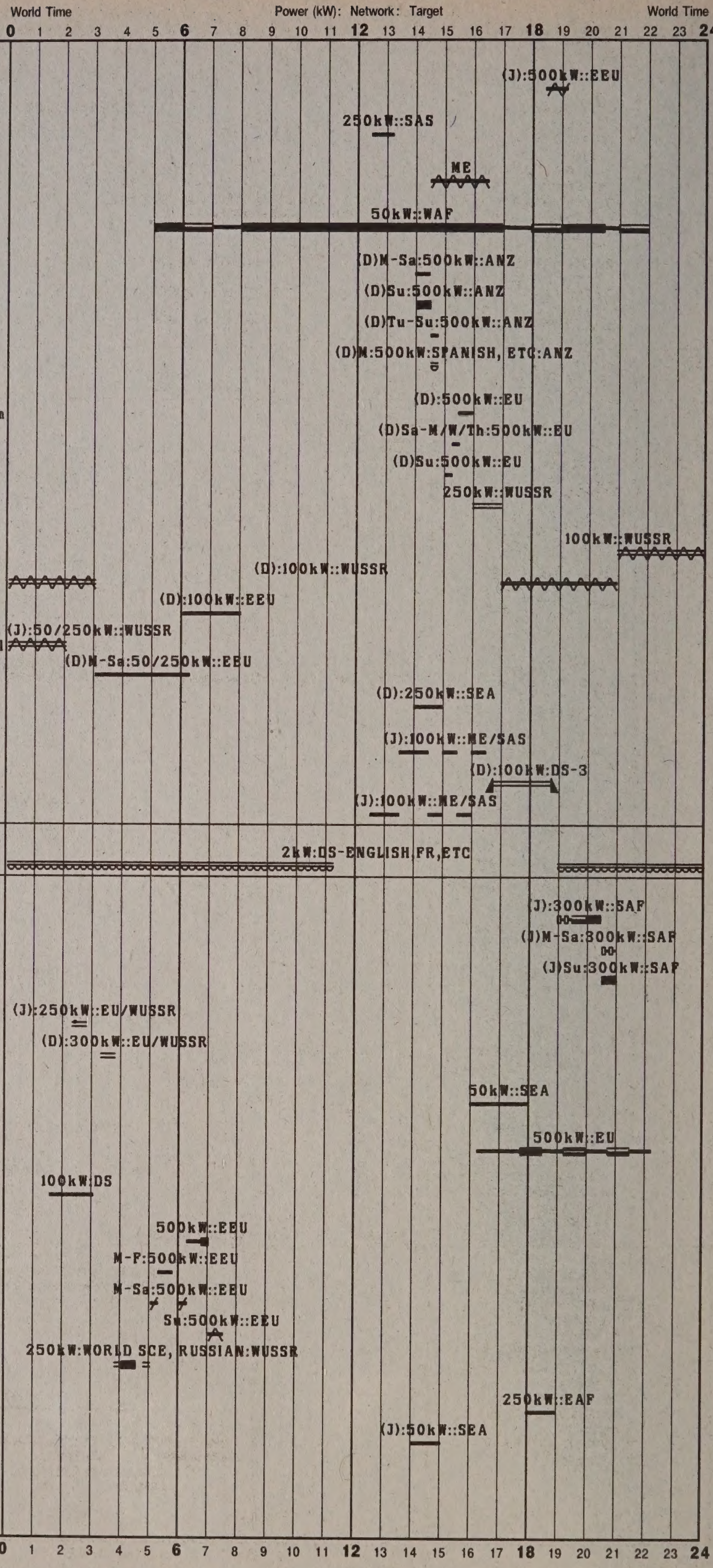
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7255 (con'd)	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::EEU
	INDIA ALL INDIA RADIO Aligarh	250kW::SAS
	IRAQ RADIO BAGHDAD	ME
	NIGERIA VOICE OF NIGERIA Ikorodu	50kW::WAF
	NORWAY RADIO NORWAY INTL Kvitsøy	(D)M-Sa:500kW::ANZ (D)Su:500kW::ANZ (D)Tu-Su:500kW::ANZ (D)M:500kW:SPANISH, ETC:ANZ
	UNITED KINGDOM BBC Holywell-Rampisham	(D):500kW::EU (D)Sa-M/W/Th:500kW::EU (D)Su:500kW::EU
	BBC Via Zyyi, Cyprus	250kW::WUSSR
	USA RFE-RL Via Germany (FR)	100kW::WUSSR (D):100kW::WUSSR (D):100kW::EEU
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR (D)M-Sa:50/250kW::EEU
	VOICE OF AMERICA Via Philippines	(D):250kW::SEA
	USSR RADIO ALMA-ATA Alma-Ata	(J):100kW::ME/SAS
	+RADIO MOSCOW Minsk	(D):100kW:DS-3
	RADIO TASHKENT Alma-Ata	(J):100kW::ME/SAS
7259.8	VANUATU RADIO VANUATU Vila, Efate Island	2kW:DS-ENGLISH,FR,ETC
7260	AUSTRIA RADIO AUSTRIA INTL Vienna	(J):300kW::SAF (J)M-Sa:300kW::SAF (J)Su:300kW::SAF
	CANADA RADIO CANADA INTL Via Sines, Portugal	(J):250kW::EU/WUSSR
	RADIO CANADA INTL Via United Kingdom	(D):300kW::EU/WUSSR
	CHINA (PR) RADIO BEIJING Kunming	50kW::SEA
	GERMANY (DR) RADIO BERLIN INTL Nauen	500kW::EU
	INDIA ALL INDIA RADIO Bombay	100kW:DS
	UNITED KINGDOM BBC Holywell-Rampisham	500kW::EEU M-F:500kW::EEU M-Sa:500kW::EEU Su:500kW::EEU
	BBC Via Zyyi, Cyprus	250kW:WORLD SCE, RUSSIAN:WUSSR
(con'd)	USA VOICE OF AMERICA Via Philippines	250kW::EAF (J):50kW::SEA



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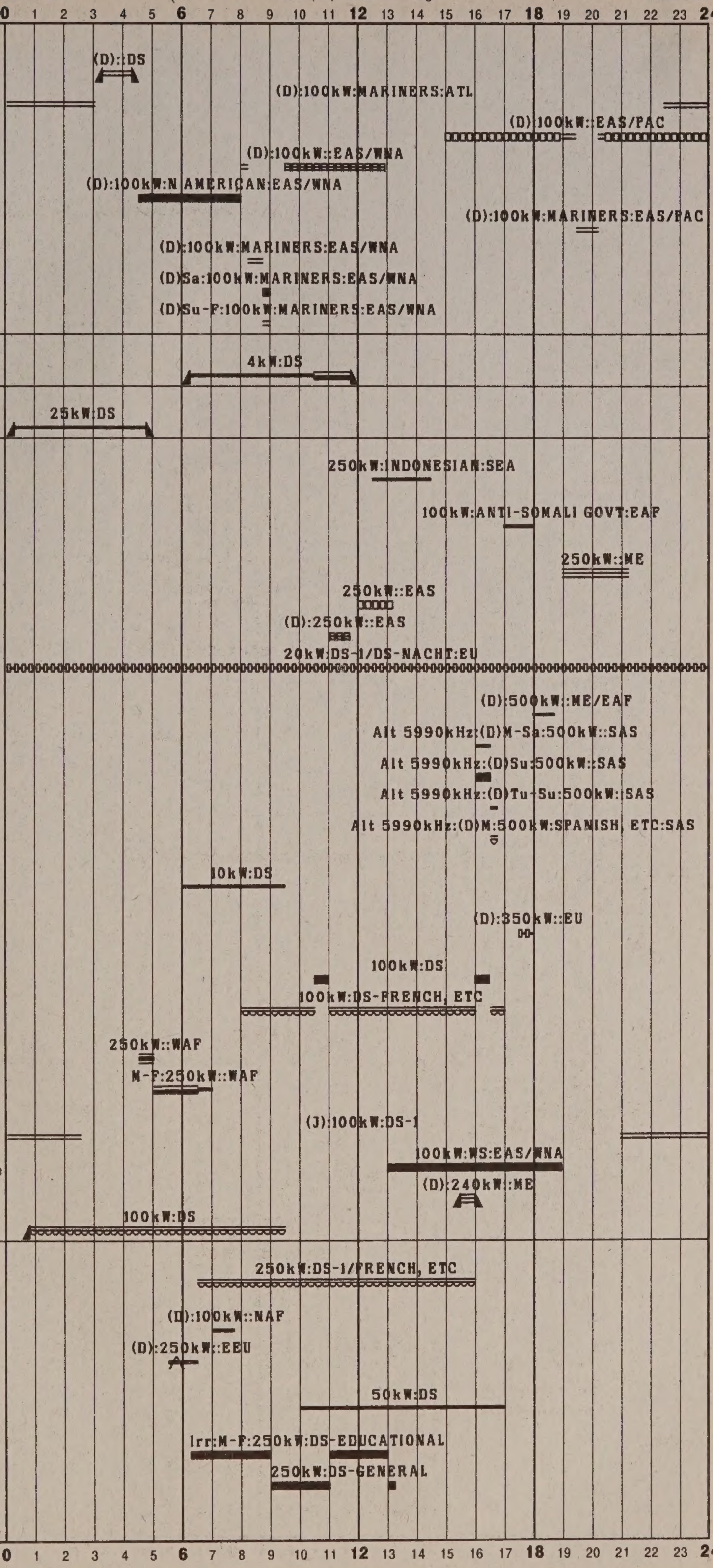

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7260 (con'd)	**USSR**	
	RADIO MOSCOW	(D)::DS
	RADIO MOSCOW Vinnitsa	(D):100kW:MARINERS:ATL
	+RADIO MOSCOW/RP&P Novosibirsk	(D):100kW::EAS/PAC
	+RADIO MOSCOW/RP&P Petropavlovsk-Kam	(D):100kW::EAS/WNA
	+RADIO MOSCOW/RP&P Petropavlovsk-Kam	(D):100kW:N AMERICAN:EAS/WNA
	+RADIO TIKHIY OKEAN Novosibirsk	(D):100kW:MARINERS:EAS/PAC
	+RADIO TIKHIY OKEAN Petropavlovsk-Kam	(D):100kW:MARINERS:EAS/WNA
	+RADIO TIKHIY OKEAN Petropavlovsk-Kam	(D)Sa:100kW:MARINERS:EAS/WNA
	+RADIO TIKHIY OKEAN Petropavlovsk-Kam	(D)Su-F:100kW:MARINERS:EAS/WNA
7260v	**COMOROS**	
	RADIO COMORO Moroni	4kW:DS
7262	**MONGOLIA**	
	RADIO ULAN BATOR Ulan Bator	25kW:DS
7265	**AUSTRALIA**	
	RADIO AUSTRALIA Darwin	250kW:INDONESIAN:SEA
	CLANDESTINE (AFRICA)	
	"RADIO HALGAN" Bantu Liben, Ethi'a	100kW:ANTI-SOMALI GOVT:EAF
	GERMANY (FR)	
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::ME
	DEUTSCHE WELLE Via Sri Lanka	250kW::EAS (D):250kW::EAS
	SUDWESTFUNK Messkirch-Rohrd'f	20kW:DS-1/DS-NACHT:EU
	NORWAY	
	RADIO NORWAY INTL Kvitsøy	(D):500kW::ME/EAF Alt 5990kHz:(D)M-Sa:500kW::SAS Alt 5990kHz:(D)Su:500kW::SAS Alt 5990kHz:(D)Tu-Su:500kW::SAS Alt 5990kHz:(D)M:500kW:SPANISH, ETC:SAS
	PAKISTAN (AZAD K)	
	AZAD KASHMIR RADIO Via Islamabad	10kW:DS
	SWEDEN	
	+RADIO SWEDEN INTL Hörby	(D):350kW::EU
	TOGO	
	RADIO LOME Lomé-Togblekope	100kW:DS 100kW:DS-FRENCH, ETC
	USA	
	VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF M-F:250kW::WAF
	USSR	
	RADIO MOSCOW Sverdlovsk	(J):100kW:DS-1
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	100kW:WS:EAS/WNA
	+RADIO MOSCOW/RP&P Ryazan'	(D):240kW::ME
	YAKUT RADIO Yakutsk	100kW:DS
7270	**GABON**	
	RTV GABONAISE Franceville	250kW:DS-1/FRENCH, ETC
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	(D):100kW::NAF
	DEUTSCHE WELLE Via Sines, Portugal	(D):250kW::EEU
	INDONESIA	
	R REP INDONESIA Jakarta, Jawa	50kW:DS
	KENYA	
	VOICE OF KENYA Nairobi	Irr:M-F:250kW:DS-EDUCATIONAL 250kW:DS-GENERAL
(con'd)		

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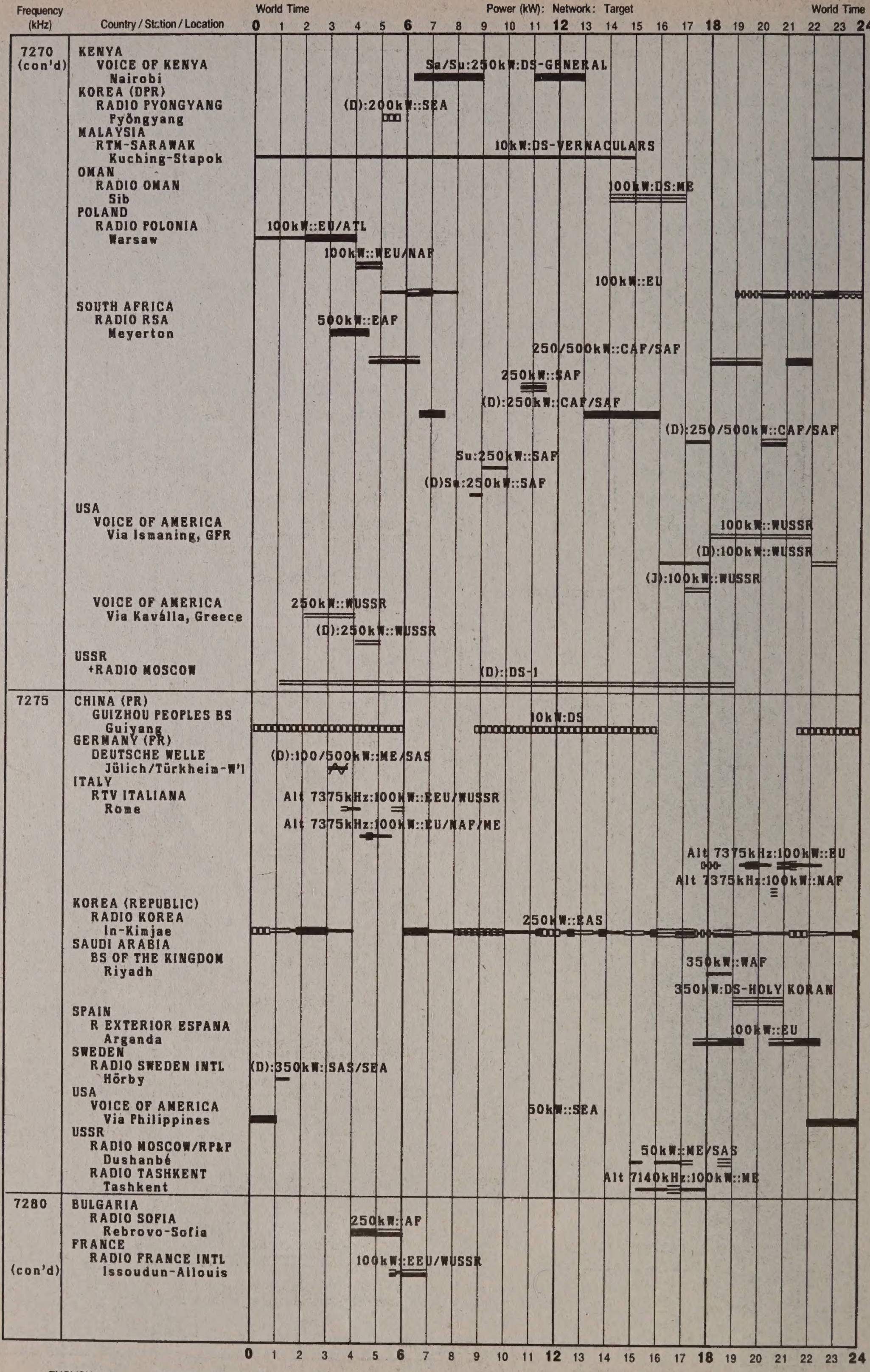

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7270 (con'd)	**KENYA** VOICE OF KENYA Nairobi	Sa/Su:250kW:DS-GENERAL
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	(D):200kW::SEA
	MALAYSIA RTM-SARAWAK Kuching-Stapok	10kW:DS-VERNACULARS
	OMAN RADIO OMAN Sib	100kW:DS:ME
	POLAND RADIO POLONIA Warsaw	100kW::EU/ATL 100kW::WEU/NAF 100kW::EU
	SOUTH AFRICA RADIO RSA Meyerton	500kW::EAF 250/500kW::CAF/SAF 250kW::SAF (D):250kW::CAF/SAF (D):250/500kW::CAF/SAF Su:250kW::SAF (D)Su:250kW::SAF
	USA VOICE OF AMERICA Via Ismaning, GFR	100kW::WUSSR (D):100kW::WUSSR (J):100kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	250kW::WUSSR (D):250kW::WUSSR
	USSR +RADIO MOSCOW	(D)::DS-1
7275	**CHINA (PR)** GUIZHOU PEOPLES BS Guiyang	10kW:DS
	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	(D):100/500kW::ME/SAS
	ITALY RTV ITALIANA Rome	Alt 7375kHz:100kW::EEU/WUSSR Alt 7375kHz:100kW::EU/NAF/ME Alt 7375kHz:100kW::EU Alt 7375kHz:100kW::NAF
	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	250kW::EAS
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW::WAF 350kW:DS-HOLY KORAN
	SPAIN R EXTERIOR ESPANA Arganda	100kW::EU
	SWEDEN RADIO SWEDEN INTL Hörby	(D):350kW::SAS/SEA
	USA VOICE OF AMERICA Via Philippines	50kW::SEA
	USSR RADIO MOSCOW/RP&P Dushanbé	50kW::ME/SAS
	RADIO TASHKENT Tashkent	Alt 7140kHz:100kW::ME
7280	**BULGARIA** RADIO SOFIA Rebrovo-Sofia	250kW::AF
(con'd)	**FRANCE** RADIO FRANCE INTL Issoudun-Allouis	100kW::EEU/WUSSR

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Frequency (kHz)	Country / Station / Location	World Time — Power (kW): Network: Target
7280 (con'd)	**FRANCE** RADIO FRANCE INTL Issoudun-Allouis	(D):100kW::EEU/WUSSR (J):500kW::AF
	INDIA ALL INDIA RADIO Delhi	50kW:DS-ENGLISH, ETC
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW:GENERAL:SEA
	SAUDI ARABIA BS OF THE KINGDOM Jiddah	50kW:DS-GENERAL:ME/EAF
	USA VOICE OF AMERICA Via Ismaning, GFR	(D):100kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	250kW::WUSSR (D):250kW::WUSSR (J):250kW::WUSSR 250kW:HINDI,PERSIAN,ETC:ME/SAS
	VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/CAF
	USSR +RADIO KIEV Moscow	(D):200kW::EU
	+RADIO KIEV Moscow	(D):240kW:G:EU
	RADIO MOSCOW Moscow	(J):200kW:MARINERS:ATL
	+RADIO MOSCOW Moscow	(D):200kW:DS-1
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	(D):240kW::EAS
	+RADIO MOSCOW/RP&P Moscow	(D):200kW::CA
	+RADIO MOSCOW/RP&P Moscow	(D):200kW::EU
7285	**CANADA** RADIO CANADA INTL Via Sines, Portugal	(D):250kW::EU/WUSSR
	CHINA (PR) GANSU PEOPLES BS Lanzhou	15kW:DS-VERNACULARS
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	SEA EAS
	VOICE OF ASIA Kao-hsiung	100kW::SEA
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::SEA/ANZ 100kW::ME
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::ME/SAS/SEA 500kW::WUSSR (J):500kW::AF
	DEUTSCHE WELLE Via Sines, Portugal	(D):250kW::EEU
	HOLLAND RADIO NEDERLAND Via Madagascar	300kW::SEA
	NIGERIA RADIO NIGERIA Lagos	50kW:DS-1/ENGLISH, ETC
	POLAND RADIO POLONIA Warsaw	100kW::EU 100kW::NAF 100kW::EU/NAF
	USA VOICE OF AMERICA Via Philippines	100kW::EAS
	USSR +RADIO MOSCOW Moscow	(D):240kW:DS-2
	+RADIO MOSCOW/RP&P Chita	(D):500kW::SEA
7285v (con'd)	**MALI** RTV MALIENNE Bamako	50kW:DS-FRENCH, ETC

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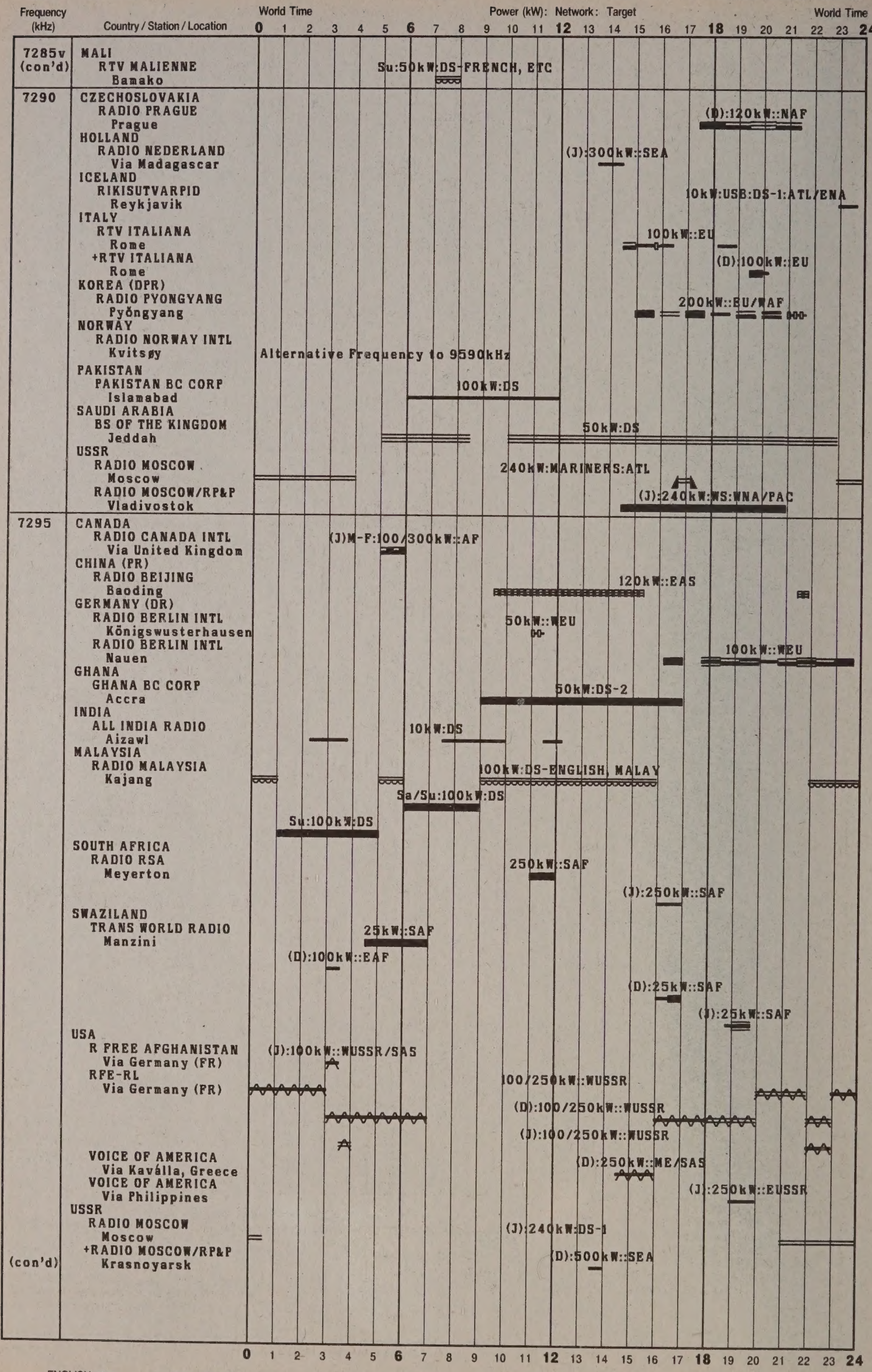

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7285v (con'd)	MALI RTV MALIENNE Bamako	Su:50kW:DS-FRENCH, ETC
7290	CZECHOSLOVAKIA RADIO PRAGUE Prague	(D):120kW::NAF
	HOLLAND RADIO NEDERLAND Via Madagascar	(J):300kW::SEA
	ICELAND RIKISUTVARPID Reykjavik	10kW:USB:DS-1:ATL/ENA
	ITALY RTV ITALIANA Rome	100kW::EU
	+RTV ITALIANA Rome	(D):100kW::EU
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	200kW::EU/WAF
	NORWAY RADIO NORWAY INTL Kvitsøy	Alternative Frequency to 9590kHz
	PAKISTAN PAKISTAN BC CORP Islamabad	100kW:DS
	SAUDI ARABIA BS OF THE KINGDOM Jeddah	50kW:DS
	USSR RADIO MOSCOW Moscow	240kW:MARINERS:ATL
	RADIO MOSCOW/RP&P Vladivostok	(J):240kW:WS:WNA/PAC
7295	CANADA RADIO CANADA INTL Via United Kingdom	(J)M-F:100/300kW::AF
	CHINA (PR) RADIO BEIJING Baoding	120kW::EAS
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	50kW::WEU
	RADIO BERLIN INTL Nauen	100kW::WEU
	GHANA GHANA BC CORP Accra	50kW:DS-2
	INDIA ALL INDIA RADIO Aizawl	10kW:DS
	MALAYSIA RADIO MALAYSIA Kajang	100kW:DS-ENGLISH, MALAY Sa/Su:100kW:DS Su:100kW:DS
	SOUTH AFRICA RADIO RSA Meyerton	250kW::SAF (J):250kW::SAF
	SWAZILAND TRANS WORLD RADIO Manzini	25kW::SAF (D):100kW::EAF (D):25kW::SAF (J):25kW::SAF
	USA R FREE AFGHANISTAN Via Germany (FR)	(J):100kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	100/250kW::WUSSR (D):100/250kW::WUSSR (J):100/250kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::ME/SAS
	VOICE OF AMERICA Via Philippines	(J):250kW::EUSSR
	USSR RADIO MOSCOW Moscow	(J):240kW:DS-1
(con'd)	+RADIO MOSCOW/RP&P Krasnoyarsk	(D):500kW::SEA

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7295 (con'd)	USSR +RADIO MOSCOW/RP&P Krasnoyarsk	(D):500kW:WS:SEA
	ZAIRE LA VOIX DU ZAIRE Mbuji-Mayi	Irr::10kW:DS Irr:Sa/Su:10kW:DS Irr:Su:10kW:DS
7300	ALBANIA RADIO TIRANA Lushnjë	100kW::NA/CA 100kW::EU 100kW::WUSSR 50kW:ITALIAN:EU 100kW:PERSIAN, TURKISH:ME
	USSR RADIO MOSCOW	(D):::CA
7305	USSR +RADIO MOSCOW Krasnodar	100kW:DS-2
	+RADIO MOSCOW Novosibirsk	(D):100kW:DS-1
	RADIO MOSCOW Star'obel'sk	100kW:DS-2
	RADIO MOSCOW/RP&P Star'obel'sk	100kW::ME 100kW:WS:ME
7310	ALBANIA RADIO TIRANA Lushnjë	50kW:GERMAN,POLISH,ETC:EU
	MONACO TRANS WORLD RADIO Monte Carlo	100kW::WUSSR M/F/Sa:100kW::WUSSR
	TUNISIA RTV TUNISIENNE Sfax	Alt 7225kHz:Irr::100kW:RAMADAN:EU Alt 7225kHz:100kW::EU
	USSR +RADIO MOSCOW Khabarovsk	(D):100kW:DS-2
	RADIO MOSCOW Moscow	100kW::EU/ATL
	+RADIO MOSCOW Moscow	(D):100kW::EU/ATL
	RADIO MOSCOW Nikolayevsk 'Amure	100kW:DS-2
	RADIO MOSCOW/RP&P Moscow	(D):100kW:N AMERICAN:ENA (D):100kW::ENA (D):100kW:WS:EU/ATL
7315	CHINA (PR) RADIO BEIJING	WAF/CAF
	RADIO BEIJING Xi'an	120kW::SAS
	PAKISTAN RADIO PAKISTAN Islamabad	100kW::ME
	RADIO PAKISTAN Karachi	50kW::SAS/SEA
	USSR RADIO MOSCOW	(D)::MARINERS
	RADIO MOSCOW Kalinin	(J):100kW:DS-1
	RADIO MOSCOW/RP&P Irkutsk	(J):500kW:WS:EAS (D):500kW::EAS (D):500kW:WS:SAS
7320	MOZAMBIQUE EP DE NAMPULA Nampula	0.25kW:DS-PORTUGUESE, ETC
	UNITED KINGDOM BBC Multiple Locations	250/300kW::ME/NAF 250/300kW:WORLD SERVICE:EU
(con'd)		

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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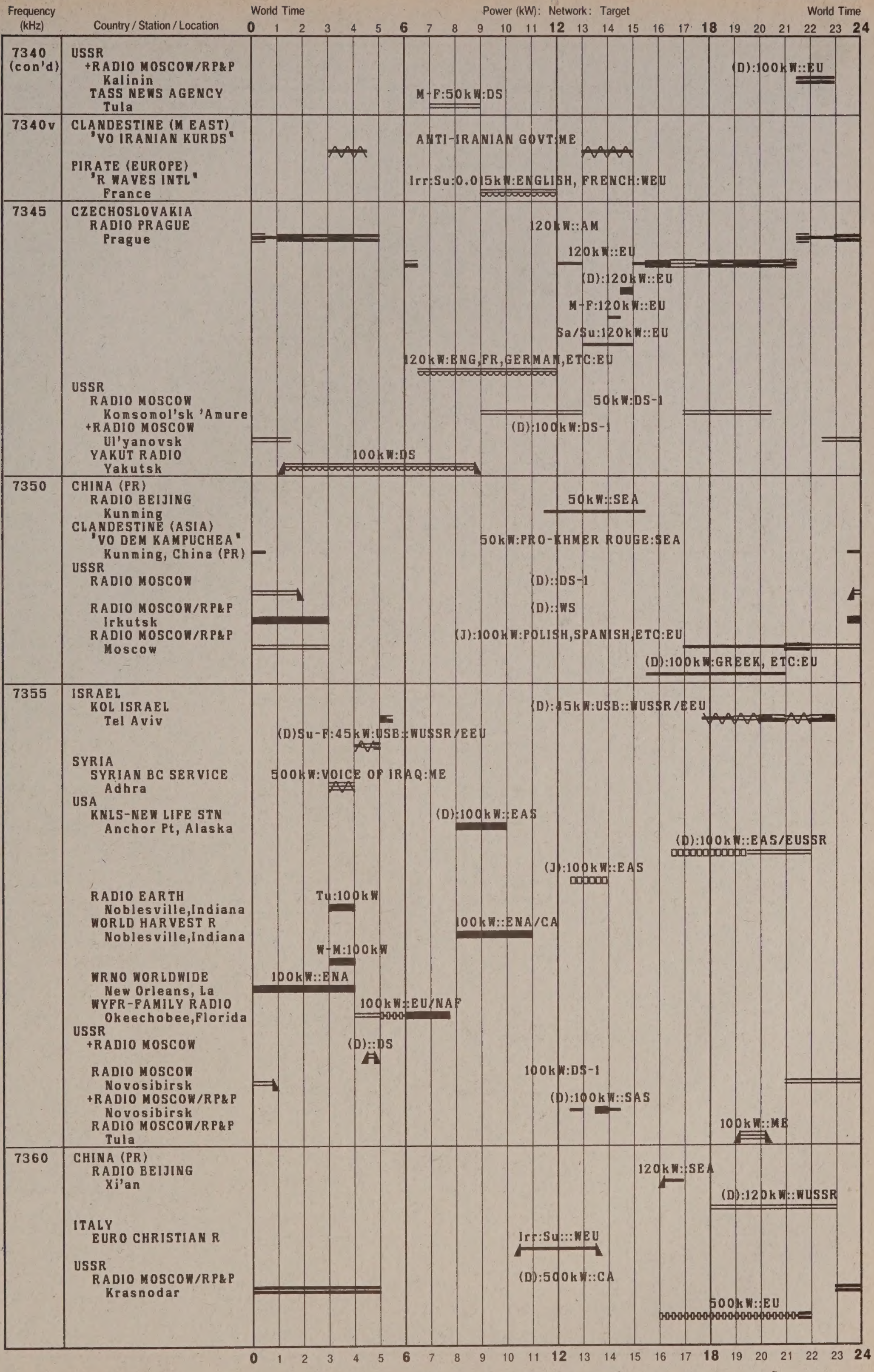
7320 (con'd)	USSR MAGADAN RADIO Yakutsk	100kW:DS
	+RADIO MOSCOW/RP&P Krasnodar	(D):500kW:N AMERICAN:ENA
	RADIO MOSCOW/RP&P Minsk	(J):100kW:MARINERS:ENA/CA
		(J):100kW::EU
		(J):100kW:WS:EU
7320v	CLANDESTINE (ASIA) 'VIET RESISTANCE' Eastern Thailand	ANTI-HANOI:SEA
7325	PAKISTAN +PAKISTAN BC CORP Rawalpindi	(D):10kW:DS
	+PAKISTAN BC CORP Rawalpindi	(D)Sa-Th:10kW:DS
	UNITED KINGDOM BBC Various Locations	WORLD SERVICE:ANZ
		(J):::EEU
	USA VOICE OF AMERICA Via Woofferton, UK	300kW::EU
	USSR RADIO MOSCOW Novosibirsk	50kW:DS-1
		(J):50kW:DS-2
	+RADIO MOSCOW/RP&P Novosibirsk	(D):500kW::EU
	RADIO TASHKENT Frunze, Kirgiziya	(J):100kW::SAS
7330	USSR RADIO KIEV Kiev	(J):100kW::EU/ATL
	RADIO MOSCOW/RP&P	(D):::WAF/SA
	RADIO MOSCOW/RP&P Chita	100kW::EAS
	+RADIO MOSCOW/RP&P Chita	(D):100kW::SAS/ME
	+RADIO MOSCOW/RP&P Khabarovsk	(D):240kW::EAS
	RADIO MOSCOW/RP&P Kiev	(J):100kW::EU/ATL
	RS SOV BELORUSSIA Kiev	(J)Su-F:100kW::EU/ATL
		(J)Sa:100kW:1ST & 3RD SATS:EU/ATL
		(J)Sa:100kW:2ND & 4TH SATS:EU/ATL
7335	CHINA (PR) CENTRAL PEOPLES BS Xi'an	50kW:DS-1
	CLANDESTINE (EUROPE) 'OUR RADIO' Schwerin,E Germany	TURKISH COMMUNIST:EU/ME
	'VO TURKISH CP' Schwerin,E Germany	TURKISH COMMUNIST:EU/ME
	USSR RADIO MOSCOW Khabarovsk	100kW:DS-1
		100kW:DS-2
	+RADIO MOSCOW/RP&P Simferopol'	(D):500kW:N AMERICAN:NA/CA
	+RADIO MOSCOW/RP&P Simferopol'	(D):500kW::NA/CA
	+RADIO MOSCOW/RP&P Simferopol'	(D):500kW:WS:NA/CA
	+RADIO MOSCOW/RP&P Simferopol'	(D):500kW:UK SVC:EU
	+RADIO MOSCOW/RP&P Simferopol'	(D):500kW:WS:EU
	RADIO TIKHIY OKEAN Khabarovsk	100kW:MARINERS
7340	USSR RADIO MOSCOW Krasnoyarsk	(J):100kW:DS-2
	+RADIO MOSCOW Leningrad	(D):100kW:DS-1
	+RADIO MOSCOW Yerevan	(D):120kW::ATL
	+RADIO MOSCOW/RP&P	(D)::WS
	+RADIO MOSCOW/RP&P Irkutsk	(D):500kW::EAS
(con'd)	+RADIO MOSCOW/RP&P Irkutsk	(D):500kW::SAS

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ═ SPANISH / ESPAÑOL ═
ARABIC / عربي ═ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7340 (con'd)	USSR +RADIO MOSCOW/RP&P Kalinin	(D):100kW::EU
	TASS NEWS AGENCY Tula	M-F:50kW:DS
7340v	CLANDESTINE (M EAST) 'VO IRANIAN KURDS'	ANTI-IRANIAN GOVT:ME
	PIRATE (EUROPE) 'R WAVES INTL' France	Irr:Su:0.015kW:ENGLISH, FRENCH:WEU
7345	CZECHOSLOVAKIA RADIO PRAGUE Prague	120kW::AM 120kW::EU (D):120kW::EU M-F:120kW::EU Sa/Su:120kW::EU 120kW:ENG,FR,GERMAN,ETC:EU
	USSR RADIO MOSCOW Komsomol'sk 'Amure	50kW:DS-1
	+RADIO MOSCOW Ul'yanovsk	(D):100kW:DS-1
	YAKUT RADIO Yakutsk	100kW:DS
7350	CHINA (PR) RADIO BEIJING Kunming	50kW::SEA
	CLANDESTINE (ASIA) 'VO DEM KAMPUCHEA' Kunming, China (PR)	50kW:PRO-KHMER ROUGE:SEA
	USSR RADIO MOSCOW	(D)::DS-1
	RADIO MOSCOW/RP&P Irkutsk	(D)::WS
	RADIO MOSCOW/RP&P Moscow	(J):100kW:POLISH,SPANISH,ETC:EU (D):100kW:GREEK, ETC:EU
7355	ISRAEL KOL ISRAEL Tel Aviv	(D):45kW:USB::WUSSR/EEU (D)Su-F:45kW:USB::WUSSR/EEU
	SYRIA SYRIAN BC SERVICE Adhra	500kW:VOICE OF IRAQ:ME
	USA KNLS-NEW LIFE STN Anchor Pt, Alaska	(D):100kW::EAS (D):100kW::EAS/EUSSR (J):100kW::EAS
	RADIO EARTH Noblesville,Indiana	Tu:100kW
	WORLD HARVEST R Noblesville,Indiana	100kW::ENA/CA W-M:100kW
	WRNO WORLDWIDE New Orleans, La	100kW::ENA
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::EU/NAF
	USSR +RADIO MOSCOW	(D)::DS
	RADIO MOSCOW Novosibirsk	100kW:DS-1
	+RADIO MOSCOW/RP&P Novosibirsk	(D):100kW::SAS
	RADIO MOSCOW/RP&P Tula	100kW::ME
7360	CHINA (PR) RADIO BEIJING Xi'an	120kW::SEA (D):120kW::WUSSR
	ITALY EURO CHRISTIAN R	Irr:Su:::WEU
	USSR RADIO MOSCOW/RP&P Krasnodar	(D):500kW::CA 500kW::EU

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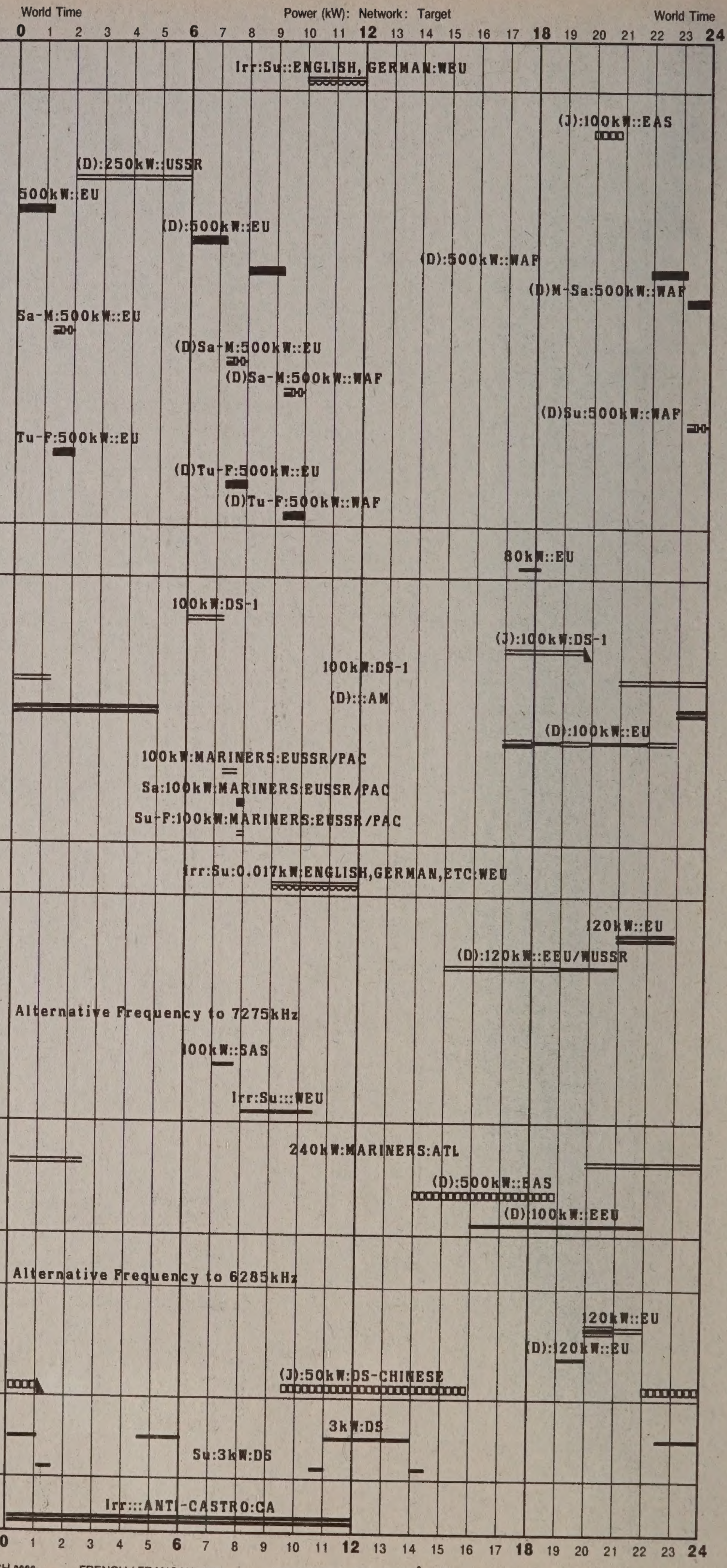
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7361	PIRATE (EUROPE) 'RADIO 101' Ireland/Germany	Irr:Su::ENGLISH, GERMAN:WEU
7365	GUAM +ADVENTIST WORLD R Agat	(J):100kW::EAS
	USA KGEI-VO FRIENDSHIP Redwood City, Ca	(D):250kW::USSR
	WCSN Olamon, Maine	500kW::EU (D):500kW::EU (D):500kW::WAF (D)M-Sa:500kW::WAF Sa-M:500kW::EU (D)Sa-M:500kW::EU (D)Sa-M:500kW::WAF (D)Su:500kW::WAF Tu-F:500kW::EU (D)Tu-F:500kW::EU (D)Tu-F:500kW::WAF
7365v	VATICAN STATE VATICAN RADIO Vatican City	80kW::EU
7370	USSR RADIO MOSCOW Khabarovsk	100kW:DS-1 (J):100kW:DS-1
	RADIO MOSCOW Moscow	100kW:DS-1
	RADIO MOSCOW/RP&P	(D):::AM
	RADIO MOSCOW/RP&P Moscow	(D):100kW::EU
	RADIO TIKHIY OKEAN Khabarovsk	100kW:MARINERS:EUSSR/PAC Sa:100kW:MARINERS:EUSSR/PAC Su-F:100kW:MARINERS:EUSSR/PAC
7373	PIRATE (EUROPE) 'RADIO CALDONIA' Holland	Irr:Su:0.017kW:ENGLISH,GERMAN,ETC:WEU
7375	CHINA (PR) RADIO BEIJING Xi'an	120kW::EU (D):120kW::EEU/WUSSR
	ITALY RTV ITALIANA Rome	Alternative Frequency to 7275kHz
	PAKISTAN RADIO PAKISTAN Islamabad	100kW::SAS
	PIRATE (EUROPE) 'RADIO AQUARIUS' Holland	Irr:Su:::WEU
7380	USSR RADIO MOSCOW Moscow	240kW:MARINERS:ATL
	+RADIO MOSCOW/RP&P Irkutsk	(D):500kW::EAS
	+RADIO MOSCOW/RP&P Sverdlovsk	(D):100kW::EEU
7383.5	PIRATE (EUROPE) 'W.L.R.' Scotland	Alternative Frequency to 6285kHz
7385	CHINA (PR) RADIO BEIJING Xi'an	120kW::EU (D):120kW::EU
	XINJIANG PBS Urümqi	(J):50kW:DS-CHINESE
7385v	LAOS LAO NATIONAL RADIO Savannakhet	3kW:DS Su:3kW:DS
7390 (con'd)	CLANDESTINE (C AMER) 'LA VOZ DEL CID' Guatemala City	Irr:::ANTI-CASTRO:CA

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World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7390 (con'd)	USSR	
	RADIO MOSCOW	(J)::DS-1
	RADIO MOSCOW/RP&P	(J)::CHINESE,MONGOLIAN:EAS
	RADIO MOSCOW/RP&P Khar'kov	CA/SA (D):::EU (J)::WS,CZECH,HUNGARIAN:EU
7400	USA	
	WORLD HARVEST R Noblesville,Indiana	100kW::CA
	USSR	
	RADIO MOSCOW Moscow	(D):100kW:DS-1
	RADIO MOSCOW Volgograd	(J):50kW:DS-2
	RADIO MOSCOW/RP&P Krasnodar	(D):120kW:FRENCH,WS,MARINERS:WAF/ATL
	RADIO MOSCOW/RP&P Moscow	(J):120kW::EEU
7410	ISRAEL	
	KOL ISRAEL Tel Aviv	(D):300kW::EU/NAF/CA (D) 45kW:USB::EU/ENA (J)Sa:300kW::WAF/SA (D)Su-F:300kW::EU/NAF/CA
	USSR	
	RADIO MOSCOW	(D)::USB:DS-2(FEEDER)
	RADIO MOSCOW Vladivostok	(D):15kW:USB:DS-2(FEEDER)
7410.2	PERU	
	SR DE LOS MILAGROS San Pablo	DS Irr:::DS
7412	INDIA	
	ALL INDIA RADIO Delhi	50kW:DS Irr::50kW:DS
7420	CHINA (PR)	
	RADIO BEIJING	WUSSR/EU (D):::SA
	RADIO BEIJING Beijing	(D):240kW::SA
	USSR	
	+RADIO MOSCOW Irkutsk	(D):50kW:DS-1
	RADIO MOSCOW Moscow	100kW:DS-1
	+RADIO MOSCOW Moscow	(D):100kW:DS-1
	+RADIO MOSCOW Serpuhkov	(D):50kW:DS-1
	RADIO MOSCOW/RP&P Khar'kov	(J):100kW::EEU
	RADIO MOSCOW/RP&P Minsk	(D):100kW::EU
	RS SOV BELORUSSIA Minsk	(D)Su-F:100kW::EU (D)Sa:100kW:1ST & 3RD SATS:EU (D)Sa:100kW:2ND & 4TH SATS:EU
	TASS NEWS AGENCY Ul'yanovsk	M-F:100kW:DS
7420v	VIETNAM	
	VOICE OF VIETNAM	SEA (D):::EAS
7430	GREECE	
	FONI TIS HELLADAS Athens	100kW::NA 100kW::EU 100kW::ANZ (D):100kW::ATL 100kW:FRENCH, GERMAN:EU (D):100kW:GREEK, ARABIC:ME
(con'd)		

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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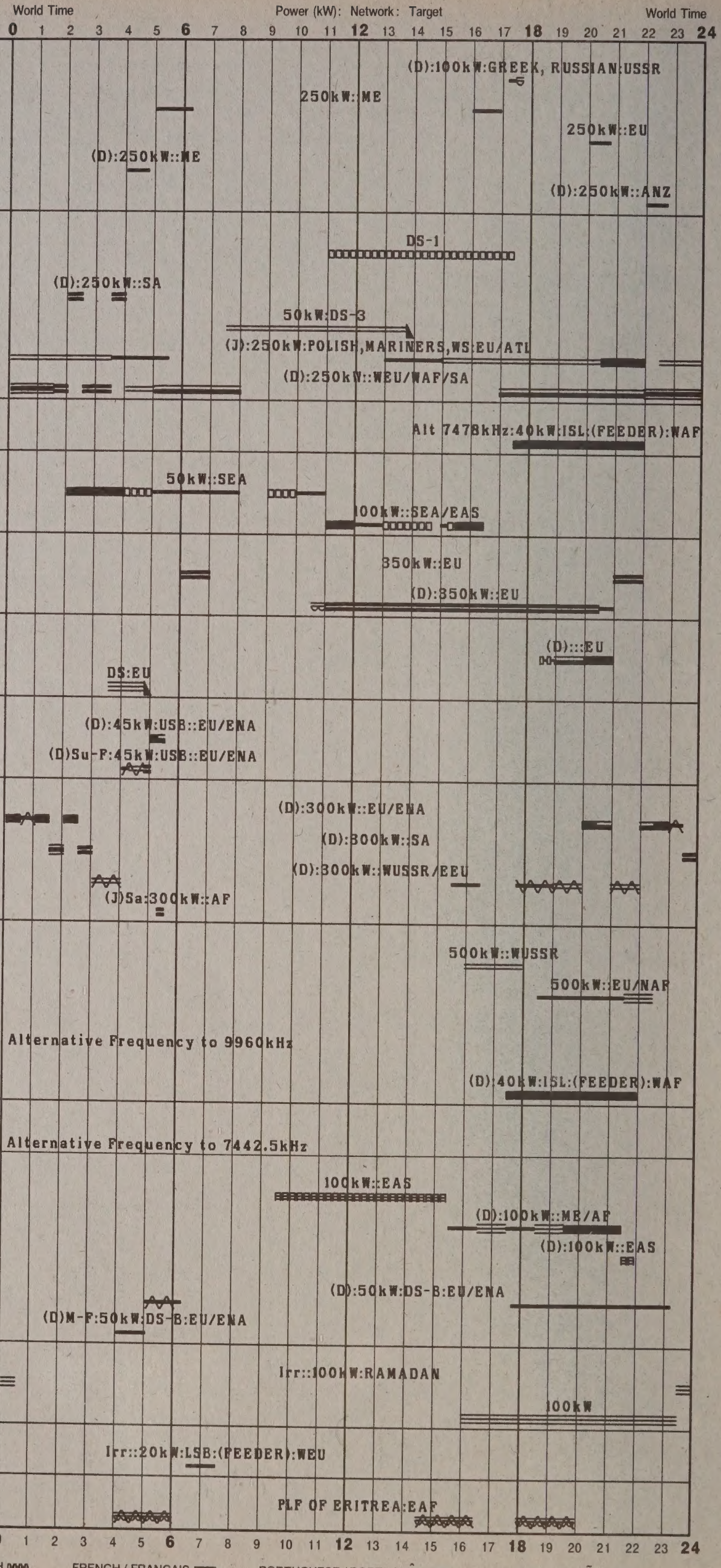

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7430 (con'd)	GREECE FONI TIS HELLADAS Athens FONI TIS HELLADAS Kaválla	(D):100kW:GREEK, RUSSIAN:USSR 250kW::ME 250kW::EU (D):250kW::ME (D):250kW::ANZ
7440	CHINA (PR) CENTRAL PEOPLES BS	DS-1
	USSR 'RADIO MAGALLANES' Moscow	(D):250kW::SA
	RADIO MOSCOW Kalinin	50kW:DS-3
	RADIO MOSCOW/RP&P Moscow	(J):250kW:POLISH,MARINERS,WS:EU/ATL (D):250kW::WEU/WAF/SA
7442.5	USA VOICE OF AMERICA Via M'rovia, Liberia	Alt 7478kHz:40kW:ISL:(FEEDER):WAF
7445	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	50kW::SEA
	VOICE OF ASIA Kao-hsiung	100kW::SEA/EAS
7450	SPAIN R EXTERIOR ESPANA Noblejas	350kW::EU (D):350kW::EU
7455	SYRIA +SYRIAN BC SERVICE Adhra	(D):::EU
	SYRIAN BC SERVICE Adhra	DS:EU
7459.8	ISRAEL KOL ISRAEL Tel Aviv	(D):45kW:USB::EU/ENA (D)Su-F:45kW:USB::EU/ENA
7464	ISRAEL KOL ISRAEL Tel Aviv	(D):300kW::EU/ENA (D):300kW::SA (D):300kW::WUSSR/EEU (J)Sa:300kW::AF
7470	CHINA (PR) RADIO BEIJING Xi'an	500kW::WUSSR 500kW::EU/NAF
	CLANDESTINE (C AMER) 'RADIO CAIMAN'	Alternative Frequency to 9960kHz
	USA VOICE OF AMERICA Via M'rovia, Liberia	(D):40kW:ISL:(FEEDER):WAF
7478	USA VOICE OF AMERICA Via M'rovia, Liberia	Alternative Frequency to 7442.5kHz
7480	CHINA (PR) RADIO BEIJING Beijing	100kW::EAS (D):100kW::ME/AF (D):100kW::EAS
	ISRAEL KOL ISRAEL Tel Aviv	(D):50kW:DS-B:EU/ENA (D)M-F:50kW:DS-B:EU/ENA
7485	TUNISIA RTV TUNISIENNE Sfax	Irr::100kW:RAMADAN 100kW
7490	GERMANY (FR) DEUTSCHE WELLE Elmshorn	Irr::20kW:LSB:(FEEDER):WEU
7490v	CLANDESTINE (AFRICA) 'VO BROAD MASSES' Argadom, Ethiopia	PLF OF ERITREA:EAF

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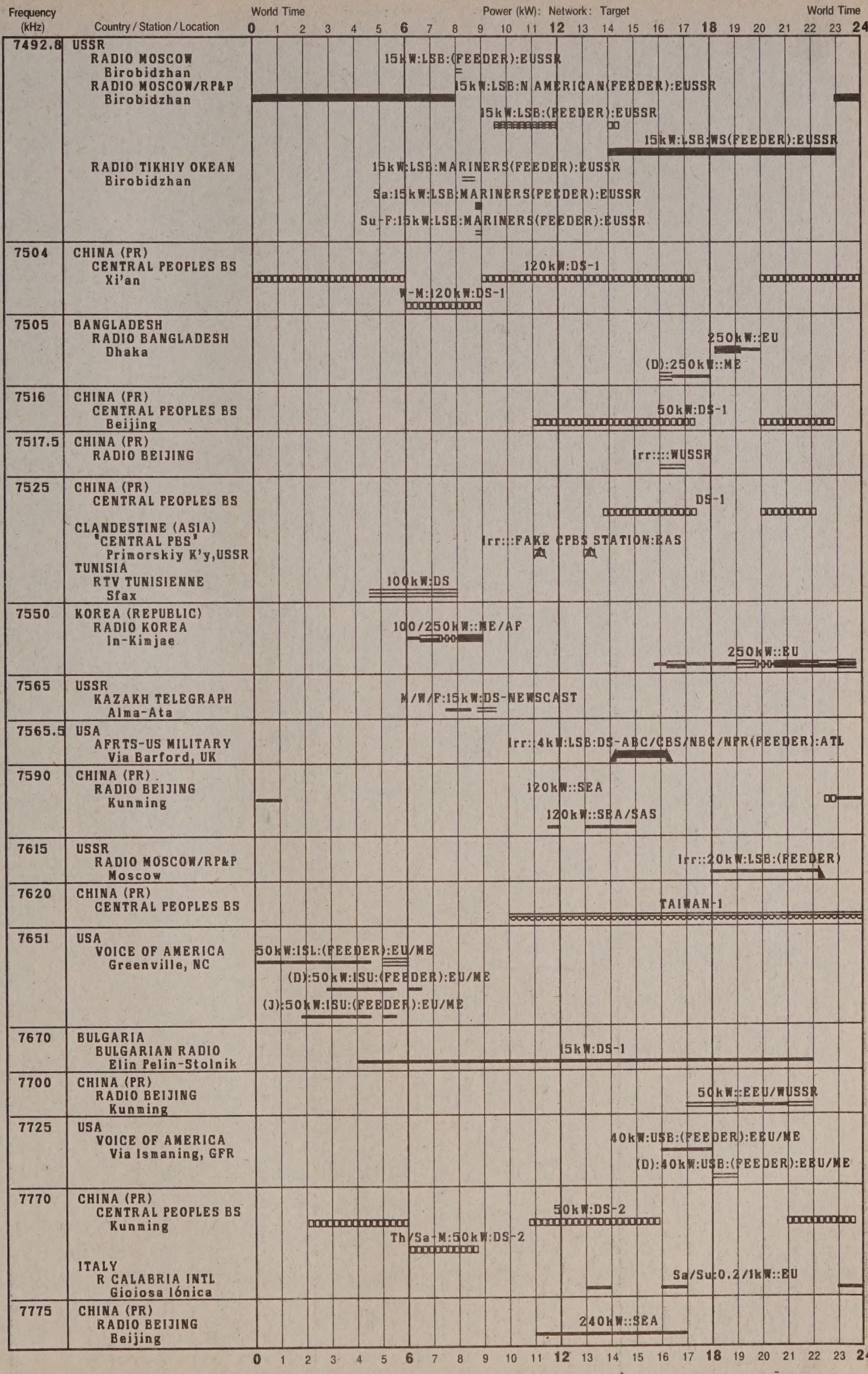

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7492.8	USSR RADIO MOSCOW Birobidzhan	15kW:LSB:(FEEDER):EUSSR
	RADIO MOSCOW/RP&P Birobidzhan	15kW:LSB:N AMERICAN(FEEDER):EUSSR 15kW:LSB:(FEEDER):EUSSR 15kW:LSB:WS(FEEDER):EUSSR
	RADIO TIKHIY OKEAN Birobidzhan	15kW:LSB:MARINERS(FEEDER):EUSSR Sa:15kW:LSB:MARINERS(FEEDER):EUSSR Su-F:15kW:LSB:MARINERS(FEEDER):EUSSR
7504	CHINA (PR) CENTRAL PEOPLES BS Xi'an	120kW:DS-1 W-M:120kW:DS-1
7505	BANGLADESH RADIO BANGLADESH Dhaka	250kW::EU (D):250kW::ME
7516	CHINA (PR) CENTRAL PEOPLES BS Beijing	50kW:DS-1
7517.5	CHINA (PR) RADIO BEIJING	Irr::::WUSSR
7525	CHINA (PR) CENTRAL PEOPLES BS	DS-1
	CLANDESTINE (ASIA) "CENTRAL PBS" Primorskiy K'y,USSR	Irr:::FAKE CPBS STATION:EAS
	TUNISIA RTV TUNISIENNE Sfax	100kW:DS
7550	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	100/250kW::ME/AF 250kW::EU
7565	USSR KAZAKH TELEGRAPH Alma-Ata	M/W/F:15kW:DS-NEWSCAST
7565.5	USA AFRTS-US MILITARY Via Barford, UK	Irr::4kW:LSB:DS-ABC/CBS/NBC/NPR(FEEDER):ATL
7590	CHINA (PR) RADIO BEIJING Kunming	120kW::SEA 120kW::SEA/SAS
7615	USSR RADIO MOSCOW/RP&P Moscow	Irr::20kW:LSB:(FEEDER)
7620	CHINA (PR) CENTRAL PEOPLES BS	TAIWAN-1
7651	USA VOICE OF AMERICA Greenville, NC	50kW:ISL:(FEEDER):EU/ME (D):50kW:ISU:(FEEDER):EU/ME (J):50kW:ISU:(FEEDER):EU/ME
7670	BULGARIA BULGARIAN RADIO Elin Pelin-Stolnik	15kW:DS-1
7700	CHINA (PR) RADIO BEIJING Kunming	50kW::EEU/WUSSR
7725	USA VOICE OF AMERICA Via Ismaning, GFR	40kW:USB:(FEEDER):EEU/ME (D):40kW:USB:(FEEDER):EEU/ME
7770	CHINA (PR) CENTRAL PEOPLES BS Kunming	50kW:DS-2 Th/Sa-M:50kW:DS-2
	ITALY R CALABRIA INTL Gioiosa Iónica	Sa/Su:0.2/1kW::EU
7775	CHINA (PR) RADIO BEIJING Beijing	240kW::SEA

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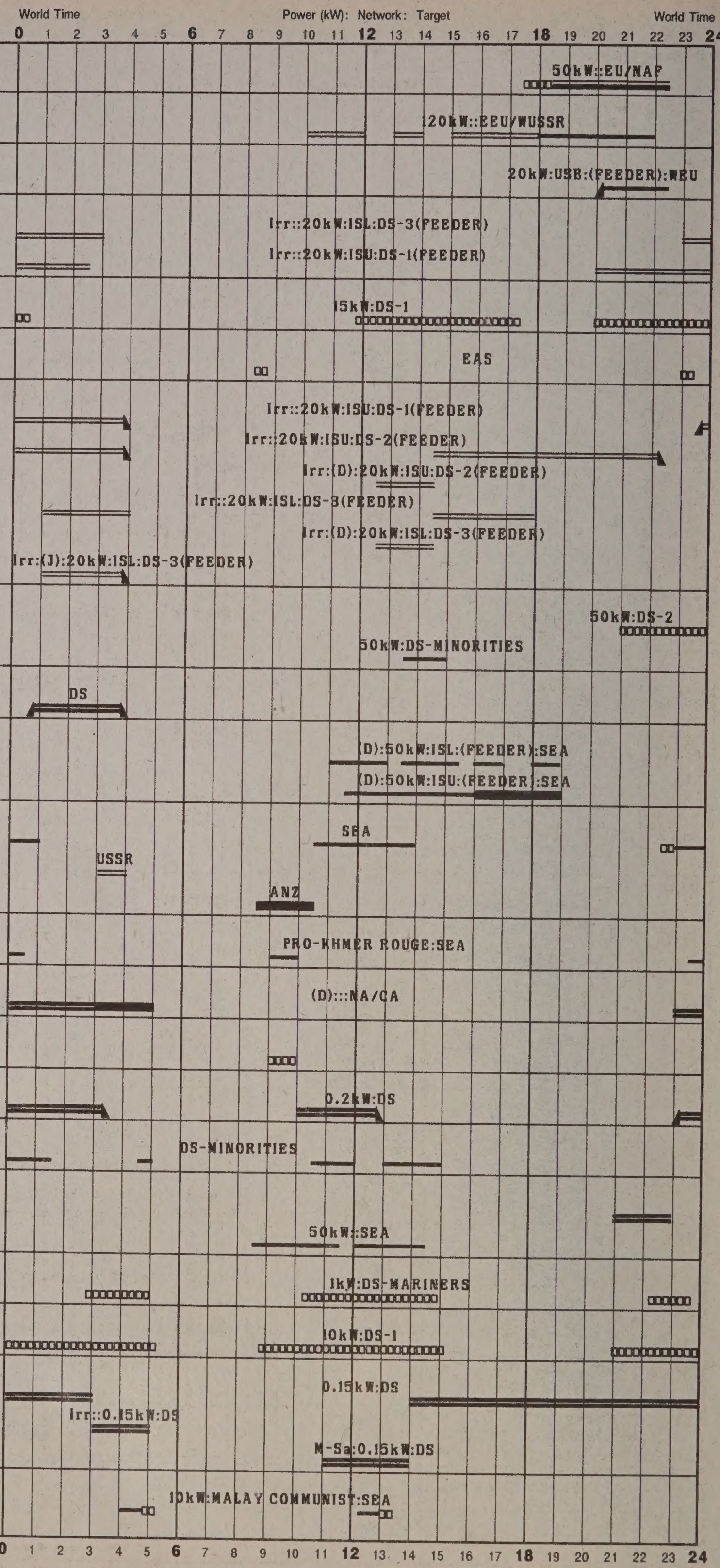

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
7800	CHINA (PR) RADIO BEIJING Kunming	50kW::EU/NAF
7820	CHINA (PR) RADIO BEIJING Beijing	120kW::EEU/WUSSR
7917.5	GERMANY (FR) DEUTSCHE WELLE Elmshorn	20kW:USB:(FEEDER):WEU
7925	USSR RADIO MOSCOW Moscow	Irr::20kW:ISL:DS-3(FEEDER) Irr::20kW:ISU:DS-1(FEEDER)
7935	CHINA (PR) CENTRAL PEOPLES BS Beijing	15kW:DS-1
7950	CHINA (PR) HUNAN METEOROLOGY	EAS
8005	USSR RADIO MOSCOW Moscow	Irr::20kW:ISU:DS-1(FEEDER) Irr::20kW:ISU:DS-2(FEEDER) Irr:(D):20kW:ISU:DS-2(FEEDER) Irr::20kW:ISL:DS-3(FEEDER) Irr:(D):20kW:ISL:DS-3(FEEDER) Irr:(J):20kW:ISL:DS-3(FEEDER)
8007	CHINA (PR) CENTRAL PEOPLES BS Xi'an	50kW:DS-2 50kW:DS-MINORITIES
8064v	PERU PARAISO LOS ANDES Moyobamba	DS
8110	USA VOICE OF AMERICA Delano, California	(D):50kW:ISL:(FEEDER):SEA (D):50kW:ISU:(FEEDER):SEA
8260	CHINA (PR) RADIO BEIJING Beijing	SEA USSR ANZ
8345	CLANDESTINE (ASIA) 'VO DEM KAMPUCHEA' China (PR)	PRO-KHMER ROUGE:SEA
8425	CHINA (PR) RADIO BEIJING	(D):::NA/CA
8450	CHINA (PR) RADIO BEIJING	
8515	PERU RADIO AMISTAD Soritor	0.2kW:DS
8566	CHINA (PR) CENTRAL PEOPLES BS	DS-MINORITIES
8660	CHINA (PR) RADIO BEIJING RADIO BEIJING Kunming	50kW::SEA
8740v	CHINA (PR) BEIHAI FISHERIES R Beihai, Guangxi	1kW:DS-MARINERS
8910	CHINA (PR) ZHEJIANG PBS Hangzhou	10kW:DS-1
8930v	PERU RADIO CONTINENTE Juanjuí	0.15kW:DS Irr::0.15kW:DS M-Sa:0.15kW:DS
8999v	CLANDESTINE (ASIA) 'VO MALAYAN DEM'Y' Hengyang, China	10kW:MALAY COMMUNIST:SEA

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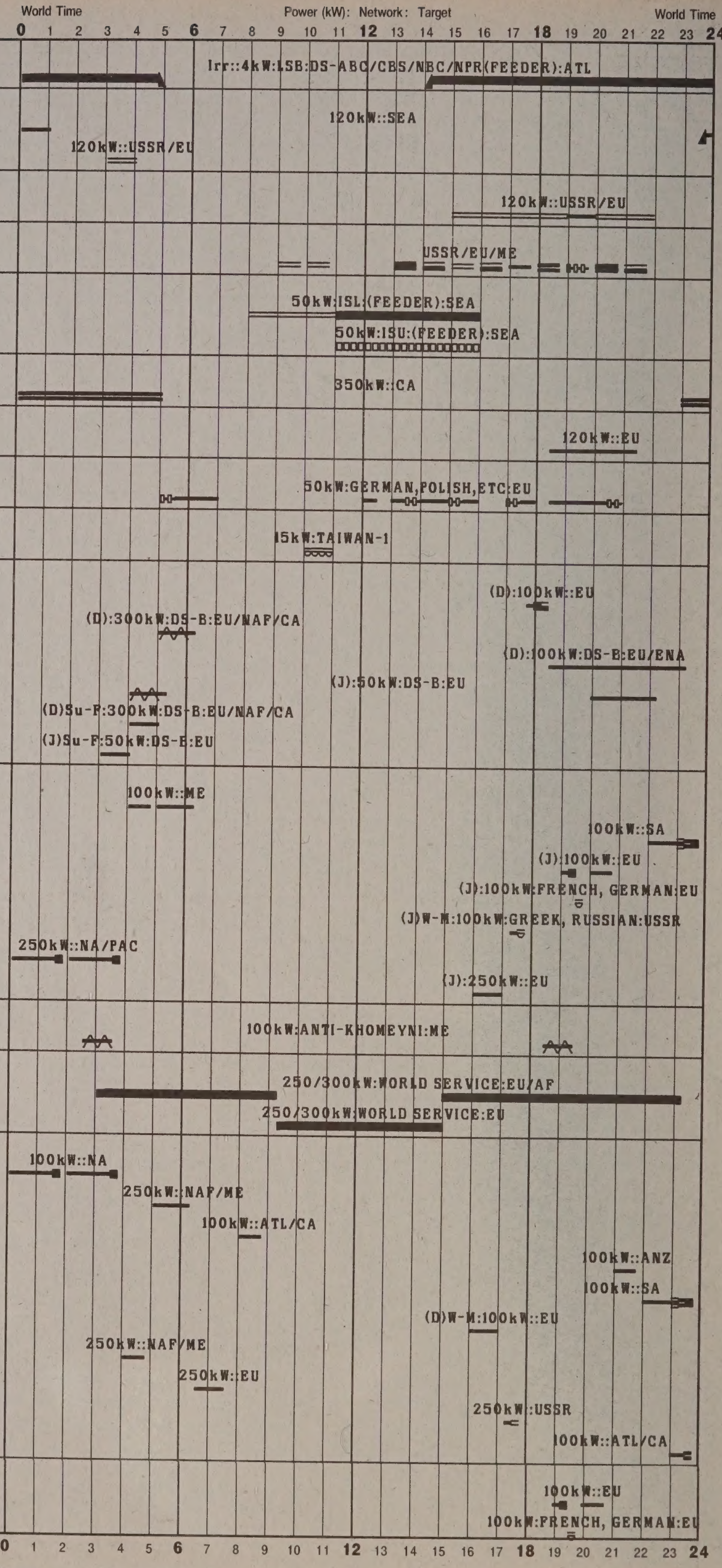
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9010.5	ISRAEL KOL ISRAEL Tel Aviv	Alternative Frequency to 9012kHz
9012	ISRAEL KOL ISRAEL Tel Aviv	Alt 9010.5kHz:300kW::ME Alt 9010.5kHz:300kW::AF/SA Alt 9010.5kHz:300kW::WUSSR/EEU (D):100kW::EU Alt 9010.5kHz:(D):300kW::WUSSR/EEU Alt 9010.5kHz:(D):300kW::EU (D)Sa:300kW::AF (D)Su-F:100kW::EU
9020	CHINA (PR) CENTRAL PEOPLES BS	DS-2 Th/Sa-M::DS-2
9022	IRAN VO THE ISLAMIC REP Tehrān	350kW:PERSIAN:EU/NAF/CA 350kW::EU/NAF/CA 350kW::EU/NAF/AF 350kW:PERSIAN:EU/NAF
9027	CLANDESTINE (M EAST) 'IRAN FREEDOM FLAG Abu Za'bal, Egypt	Alt 9040kHz:100kW:ANTI-KHOMEYNI:ME
9030	CHINA (PR) CENTRAL PEOPLES BS	DS-2
9040	CLANDESTINE (M EAST) 'IRAN FREEDOM FLAG Abu Za'bal, Egypt	Alternative Frequency to 9027kHz
9064	CHINA (PR) CENTRAL PEOPLES BS Kunming	15kW:DS-1 W-M:15kW:DS-1
9080	CHINA (PR) CENTRAL PEOPLES BS Kunming	50kW:DS-1
9090	USSR KAZAKH TELEGRAPH Alma-Ata	M/W/F:15kW:DS-NEWSCAST
9115	ARGENTINA RADIO RIVADAVIA Buenos Aires	Irr:M:10kW:USB:DS(FEEDER) Irr:Su:10kW:USB:DS(FEEDER) Su:10kW:USB:DS(FEEDER)
9140	USSR RADIO MOSCOW Moscow	(J):20kW:LSB:DS-1(FEEDER)
9170	CHINA (PR) CENTRAL PEOPLES BS Beijing	10kW:TAIWAN-2
9200	USSR RADIO MOSCOW Khabarovsk	Irr::15kW:LSB:DS-2(FEEDER) Irr:(D):15kW:LSB:DS-2(FEEDER)
9210	USSR RADIO MOSCOW RADIO MOSCOW/RP&P	(J)::ISU:DS-1(FEEDER) (J)::ISL:(FEEDER)
9215	CLANDESTINE (ASIA) 'VOICE OF UNITY' Abu Za'bal, Egypt	(D):100kW:PRO-AFGHAN REBELS:ME/SAS
9220	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	200kW::AF
9270	CLANDESTINE (ASIA) 'OCTOBER STORM' Primorskiy K'y,USSR	Irr:::ANTI-DENG XIAOPING:EAS
9290	CHINA (PR) RADIO BEIJING Kunming	50kW::EEU/WUSSR
9325	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	200kW::EU/WUSSR

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬	GERMAN / DEUTSCH ▭	FRENCH / FRANÇAIS ≡	PORTUGUESE / PORTUGUÊS ▬	SPANISH / ESPAÑOL ▬	
ARABIC / عربي ≡	RUSSIAN / РУССКИЙ =	CHINESE / 中文 ▭	JAPANESE / 日本語 ▬	MULTILINGUAL ▬	OTHER —
SUMMER ONLY (J)	WINTER ONLY (D)	JAMMING /\/\ or / or \	EARLIEST HEARD ◢	LATEST HEARD ◣	+ TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9334.3	USA AFRTS-US MILITARY Via Barford, UK	Irr::4kW:LSB:DS-ABC/CBS/NBC/NPR(FEEDER):ATL
9335	CHINA (PR) RADIO BEIJING Kunming	120kW::SEA 120kW::USSR/EU
9340	CHINA (PR) RADIO BEIJING Xi'an	120kW::USSR/EU
9345	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	USSR/EU/ME
9350	USA VOICE OF AMERICA Delano	50kW:ISL:(FEEDER):SEA 50kW:ISU:(FEEDER):SEA
9360	SPAIN R EXTERIOR ESPANA Noblejas	350kW::CA
9365	CHINA (PR) RADIO BEIJING Xi'an	120kW::EU
9375	ALBANIA RADIO TIRANA Lushnjë	50kW:GERMAN,POLISH,ETC:EU
9380	CHINA (PR) CENTRAL PEOPLES BS Beijing	15kW:TAIWAN-1
9385	ISRAEL KOL ISRAEL Tel Aviv RASHUTH HASHIDUR Tel Aviv	(D):100kW::EU (D):300kW:DS-B:EU/NAF/CA (D):100kW:DS-B:EU/ENA (J):50kW:DS-B:EU (D)Su-F:300kW:DS-B:EU/NAF/CA (J)Su-F:50kW:DS-B:EU
9395	GREECE FONI TIS HELLADAS Athens	100kW::ME 100kW::SA (J):100kW::EU (J):100kW:FRENCH, GERMAN:EU (J)W-M:100kW:GREEK, RUSSIAN:USSR
	FONI TIS HELLADAS Kavála	250kW::NA/PAC (J):250kW::EU
9400	CLANDESTINE (M EAST) "RADIO IRAN" Abu Za'bal, Egypt	100kW:ANTI-KHOMEYNI:ME
9410	UNITED KINGDOM BBC Multiple Locations	250/300kW:WORLD SERVICE:EU/AF 250/300kW:WORLD SERVICE:EU
9420	GREECE FONI TIS HELLADAS Athens	100kW::NA 250kW::NAF/ME 100kW::ATL/CA 100kW::ANZ 100kW::SA (D)W-M:100kW::EU
	FONI TIS HELLADAS Kavála	250kW::NAF/ME 250kW::EU 250kW::USSR 100kW::ATL/CA
9425	GREECE FONI TIS HELLADAS Athens	100kW::EU 100kW:FRENCH, GERMAN:EU

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ☰
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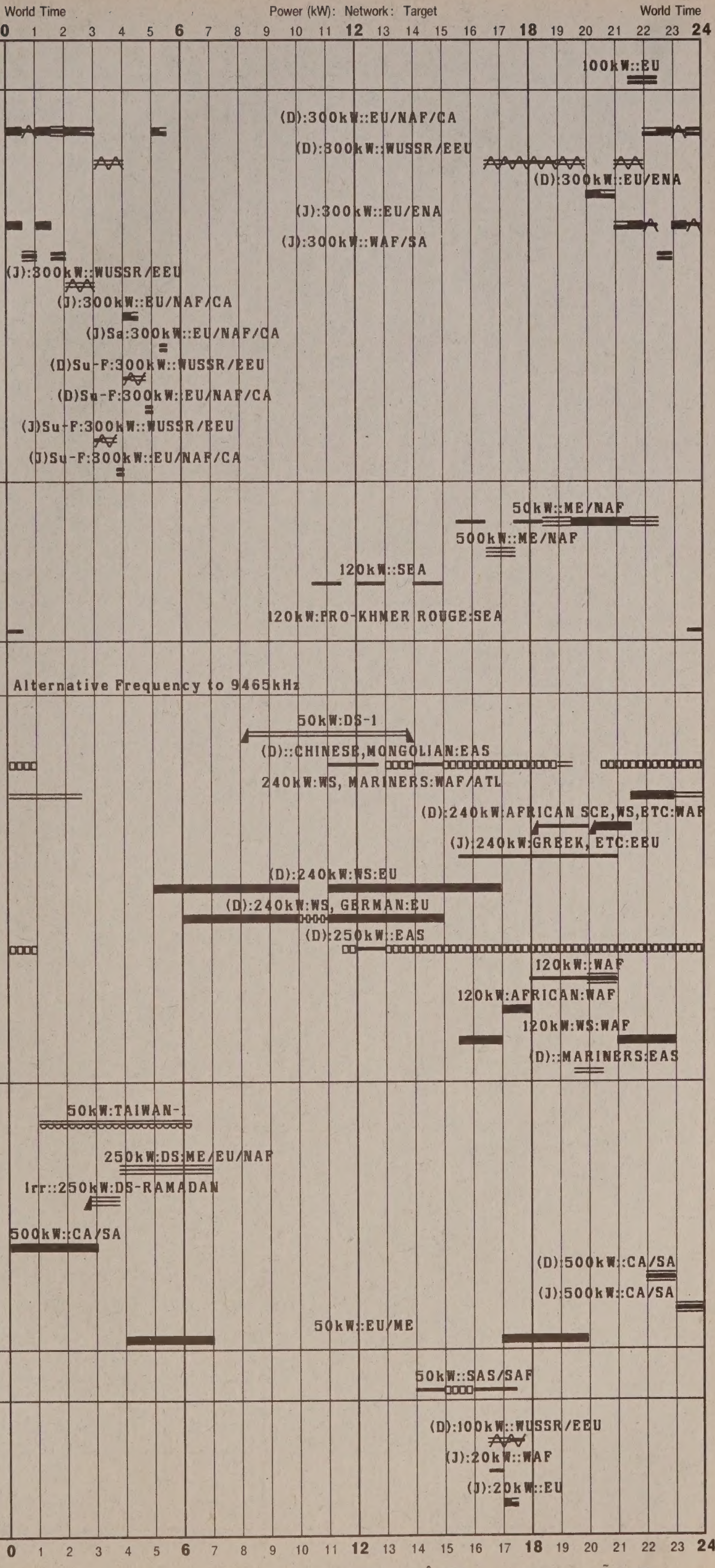
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9430	ALBANIA RADIO TIRANA Lushnjë	100kW::EU
9435	ISRAEL KOL ISRAEL Tel Aviv	(D):300kW::EU/NAF/CA (D):300kW::WUSSR/EEU (D):300kW::EU/ENA (J):300kW::EU/ENA (J):300kW::WAF/SA (J):300kW::WUSSR/EEU (J):300kW::EU/NAF/CA (J)Sa:300kW::EU/NAF/CA (D)Su-F:300kW::WUSSR/EEU (D)Su-F:300kW::EU/NAF/CA (J)Su-F:300kW::WUSSR/EEU (J)Su-F:300kW::EU/NAF/CA
9440	CHINA (PR) RADIO BEIJING Kunming	50kW::ME/NAF 500kW::ME/NAF
	RADIO BEIJING Xi'an	120kW::SEA
	CLANDESTINE (ASIA) "VO DEM KAMPUCHEA" Xi'an, China (PR)	120kW:PRO-KHMER ROUGE:SEA
9445	PAKISTAN RADIO PAKISTAN Islamabad	Alternative Frequency to 9465kHz
9450	USSR RADIO MOSCOW Novosibirsk	50kW:DS-1
	RADIO MOSCOW/RP&P	(D)::CHINESE,MONGOLIAN:EAS
	RADIO MOSCOW/RP&P Moscow	240kW:WS, MARINERS:WAF/ATL (D):240kW:AFRICAN SCE,WS,ETC:WAF (J):240kW:GREEK, ETC:EEU
	+RADIO MOSCOW/RP&P Moscow	(D):240kW:WS:EU
	RADIO MOSCOW/RP&P Moscow	(D):240kW:WS, GERMAN:EU
	+RADIO MOSCOW/RP&P Novosibirsk	(D):250kW::EAS
	RADIO MOSCOW/RP&P Yerevan	120kW::WAF 120kW:AFRICAN:WAF 120kW:WS:WAF
	RADIO TIKHIY OKEAN	(D)::MARINERS:EAS
9455	CHINA (PR) CENTRAL PEOPLES BS Kunming	50kW:TAIWAN-1
	EGYPT RADIO CAIRO Kafr Silîm-Abis	250kW:DS:ME/EU/NAF Irr::250kW:DS-RAMADAN
	USA VOICE OF AMERICA Greenville	500kW::CA/SA
	VOICE OF AMERICA Greenville, NC	(D):500kW::CA/SA (J):500kW::CA/SA
	WMLK-ASBY OF YAWEH Bethel, Pa	50kW::EU/ME
9457v	CHINA (PR) RADIO BEIJING Kunming	50kW::SAS/SAF
9460	ISRAEL KOL ISRAEL Tel Aviv	(D):100kW::WUSSR/EEU (J):20kW::WAF (J):20kW::EU
(con'd)		



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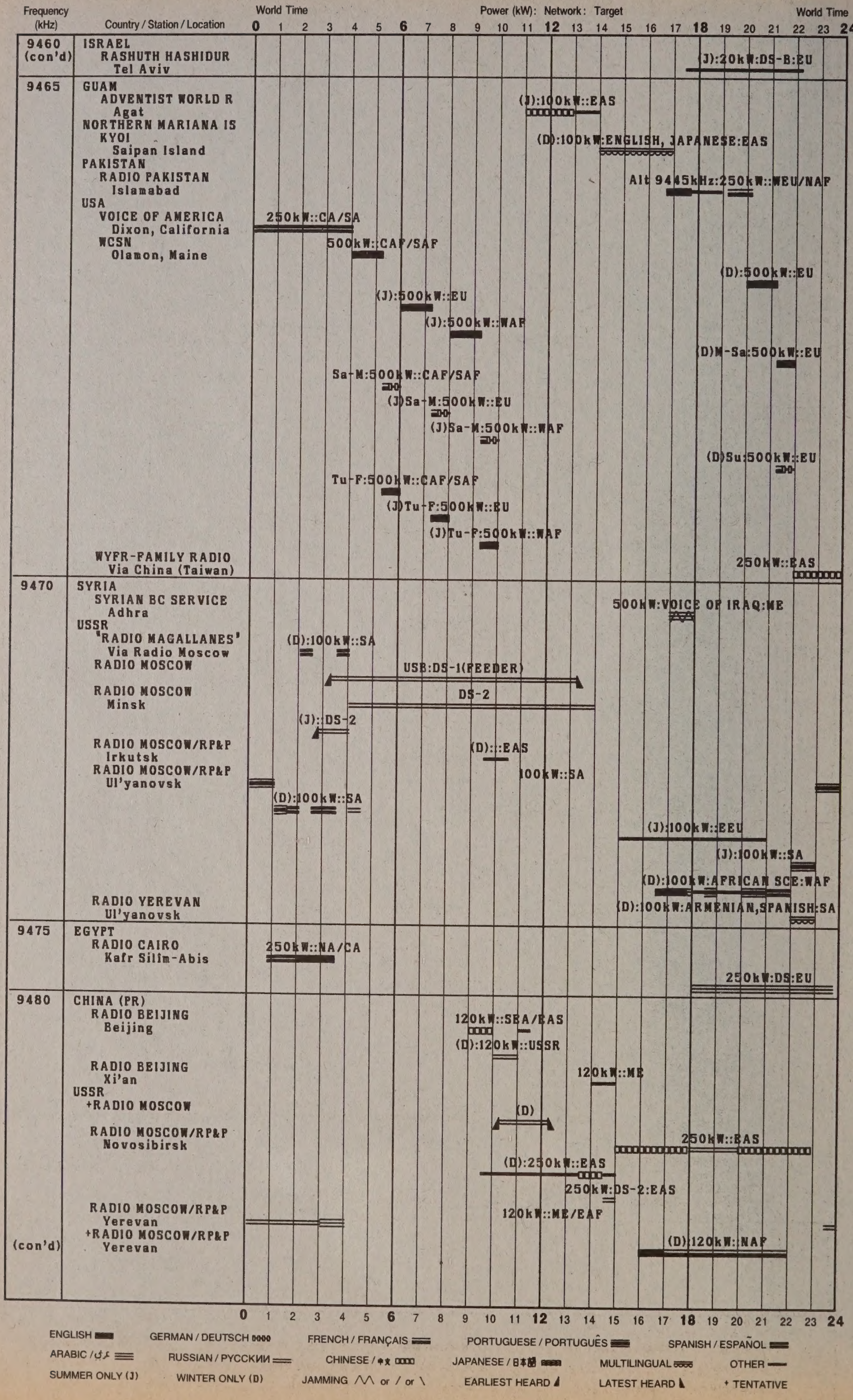
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ═ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE


Frequency (kHz)
Country / Station / Location
World Time
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Power (kW): Network: Target
World Time
9460 (con'd)
ISRAEL
RASHUTH HASHIDUR
Tel Aviv
(J):20kW:DS-B:EU
9465
GUAM
ADVENTIST WORLD R
Agat
(J):100kW::EAS
NORTHERN MARIANA IS
KYOI
Saipan Island
(D):100kW:ENGLISH, JAPANESE:EAS
PAKISTAN
RADIO PAKISTAN
Islamabad
Alt 9445kHz:250kW::WEU/NAF
USA
VOICE OF AMERICA
Dixon, California
250kW::CA/SA
WCSN
Olamon, Maine
500kW::CAF/SAF
(D):500kW::EU
(J):500kW::EU
(J):500kW::WAF
(D)M-Sa:500kW::EU
Sa-M:500kW::CAF/SAF
(J)Sa-M:500kW::EU
(J)Sa-M:500kW::WAF
(D)Su:500kW::EU
Tu-F:500kW::CAF/SAF
(J)Tu-F:500kW::EU
(J)Tu-F:500kW::WAF
WYFR-FAMILY RADIO
Via China (Taiwan)
250kW::EAS
9470
SYRIA
SYRIAN BC SERVICE
Adhra
500kW:VOICE OF IRAQ:ME
USSR
'RADIO MAGALLANES'
Via Radio Moscow
(D):100kW::SA
RADIO MOSCOW
USB:DS-1(FEEDER)
RADIO MOSCOW
Minsk
DS-2
(J)::DS-2
RADIO MOSCOW/RP&P
Irkutsk
(D)::EAS
RADIO MOSCOW/RP&P
Ul'yanovsk
100kW::SA
(D):100kW::SA
(J):100kW::EEU
(J):100kW::SA
(D):100kW:AFRICAN SCE:WAF
RADIO YEREVAN
Ul'yanovsk
(D):100kW:ARMENIAN,SPANISH:SA
9475
EGYPT
RADIO CAIRO
Kafr Silim-Abis
250kW::NA/CA
250kW:DS:EU
9480
CHINA (PR)
RADIO BEIJING
Beijing
120kW::SEA/EAS
(D):120kW::USSR
RADIO BEIJING
Xi'an
120kW::ME
USSR
+RADIO MOSCOW
(D)
RADIO MOSCOW/RP&P
Novosibirsk
250kW::EAS
(D):250kW::EAS
250kW:DS-2:EAS
RADIO MOSCOW/RP&P
Yerevan
120kW::ME/EAF
+RADIO MOSCOW/RP&P
Yerevan
(D):120kW::NAF
(con'd)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
ENGLISH
GERMAN / DEUTSCH
FRENCH / FRANÇAIS
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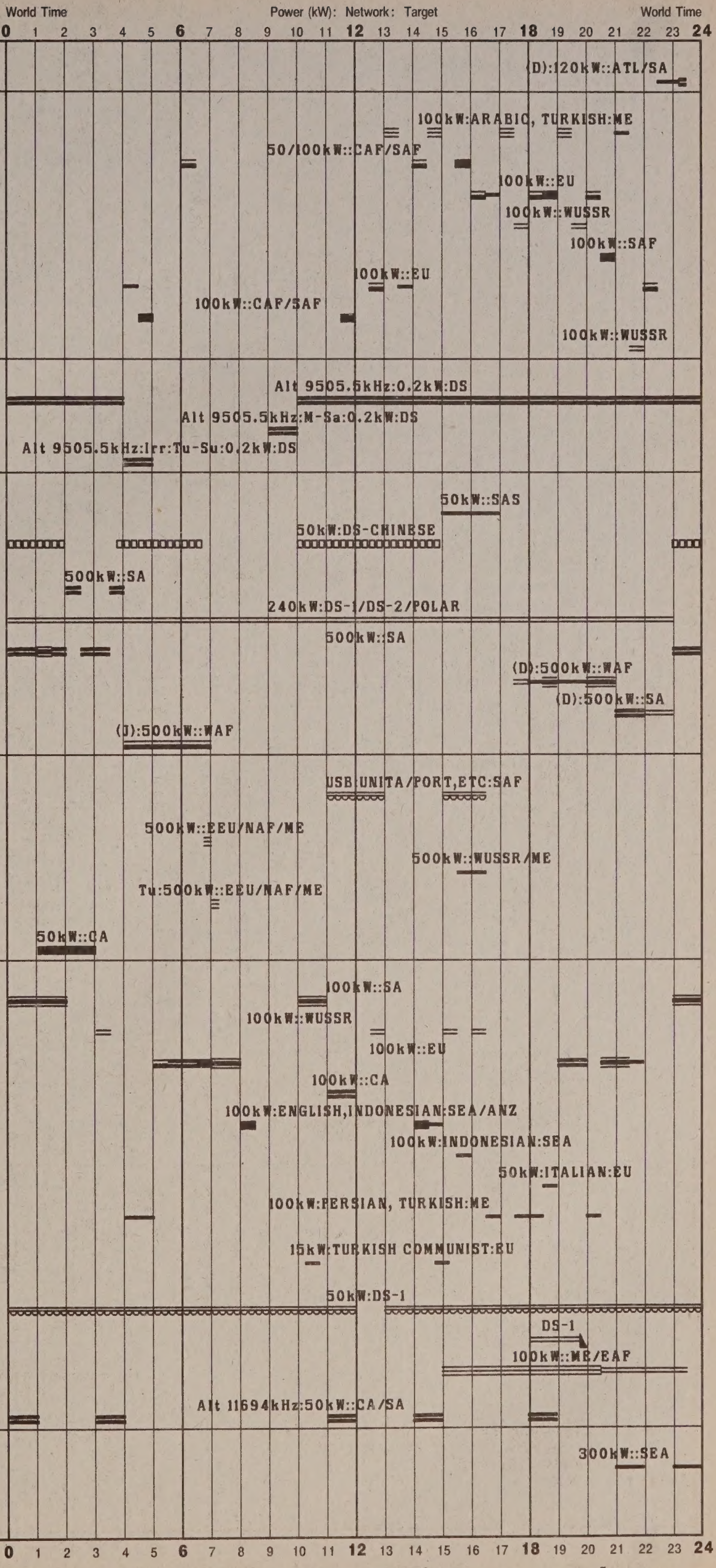
EARLIEST HEARD
LATEST HEARD
+ TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9480 (con'd)	USSR RADIO YEREVAN Yerevan	(D):120kW::ATL/SA
9480v	ALBANIA RADIO TIRANA	100kW:ARABIC, TURKISH:ME
	RADIO TIRANA Krujë	50/100kW::CAF/SAF 100kW::EU 100kW::WUSSR 100kW::SAF
	RADIO TIRANA Lushnjë	100kW::EU 100kW::CAF/SAF 100kW::WUSSR
9486	PERU RADIO TACNA Tacna	Alt 9505.5kHz:0.2kW:DS Alt 9505.5kHz:M-Sa:0.2kW:DS Alt 9505.5kHz:Irr:Tu-Su:0.2kW:DS
9490	CHINA (PR) RADIO BEIJING Lhasa	50kW::SAS
	XIZANG PEOPLES BS Lhasa	50kW:DS-CHINESE
	USSR 'RADIO MAGALLANES' Via Radio Moscow	500kW::SA
	RADIO MOSCOW Ul'yanovsk	240kW:DS-1/DS-2/POLAR
	RADIO MOSCOW/RP&P Nikolayev	500kW::SA
	+RADIO MOSCOW/RP&P Nikolayev	(D):500kW::WAF
	+RADIO MOSCOW/RP&P Nikolayev	(D):500kW::SA
	RADIO MOSCOW/RP&P Nikolayev	(J):500kW::WAF
9495	CLANDESTINE (AFRICA) 'AV DO GALO NEGRO'	USB:UNITA/PORT,ETC:SAF
	MONACO TRANS WORLD RADIO Monte Carlo	500kW::EEU/NAF/ME 500kW::WUSSR/ME Tu:500kW::EEU/NAF/ME
	USA KVOH-VOICE OF HOPE Rancho Simi, Ca	50kW::CA
9500	ALBANIA RADIO TIRANA Lushnjë	100kW::SA 100kW::WUSSR 100kW::EU 100kW::CA 100kW:ENGLISH,INDONESIAN:SEA/ANZ
	+RADIO TIRANA Lushnjë	100kW:INDONESIAN:SEA
	RADIO TIRANA Lushnjë	50kW:ITALIAN:EU 100kW:PERSIAN, TURKISH:ME
	CLANDESTINE (EUROPE) 'OUR RADIO' Cluj, Romania	15kW:TURKISH COMMUNIST:EU
	USSR MAGADAN RADIO Chita	50kW:DS-1
	RADIO MOSCOW	DS-1
	RADIO MOSCOW/RP&P Armavir	100kW::ME/EAF
	VENEZUELA RADIO NACIONAL Caracas	Alt 11694kHz:50kW::CA/SA
9505 (con'd)	AUSTRALIA RADIO AUSTRALIA Carnarvon	300kW::SEA



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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9505 (con'd)	AUSTRALIA RADIO AUSTRALIA Darwin	250kW::SEA
	BRAZIL RADIO RECORD São Paulo	Irr::7.5kW:DS 7.5kW:DS
	CHINA (PR) VO THE STRAIT-PLA Fuzhou	15kW:TAIWAN-2
	CZECHOSLOVAKIA RADIO PRAGUE Pieštány-Velké K'y	120kW::WEU Sa/Su:120kW::WEU 120kW:ENG,FR,GERMAN,ETC:WEU
	GERMANY (DR) +RADIO BERLIN INTL Königswusterhausen	(D):100kW::SA
	+RADIO BERLIN INTL Königswusterhausen	(D):100kW::WAF
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::EAS
	DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::EAS
	HOLLAND RADIO NEDERLAND Via Madagascar	300kW::SEA/ANZ
	IRAQ RADIO BAGHDAD Baghdad-Abu Ghraib	250kW::ME
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	300kW:GENERAL:PAC/WNA
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	100kW::EAS
	PHILIPPINES RADIO VERITAS ASIA Malolos	100kW::EAS
	TURKEY TURKISH RTV CORP Ankara	(J):250kW::EU
	USA RFE-RL Via Germany (FR)	(D):100/250kW::WUSSR 100/250kW::WUSSR (J):100/250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR 50/250kW::WUSSR (D):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(J):250kW::WUSSR
	USSR KAZAKH RADIO Alma-Ata	50kW:DS-2
	YUGOSLAVIA RADIO BEOGRAD Belgrade	100kW:DS-1:EU Su:100kW:DS-1:EU
	ZAMBIA RADIO ZAMBIA-ZBS Lusaka	Irr::50kW::SAF
9505.5	PERU RADIO TACNA Tacna	Alternative Frequency to 9486kHz
9509v	ALGERIA RTV ALGERIENNE Ouled Fayet	50kW:DS-3:EU/NAF 50kW::EU/NAF
9510	CHILE R SISTEMA NACIONAL Santiago	Alternative Frequency to 9550kHz
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	ME/EU/NAF
(con'd)	INDONESIA R REP INDONESIA Ujung Pandang	DS

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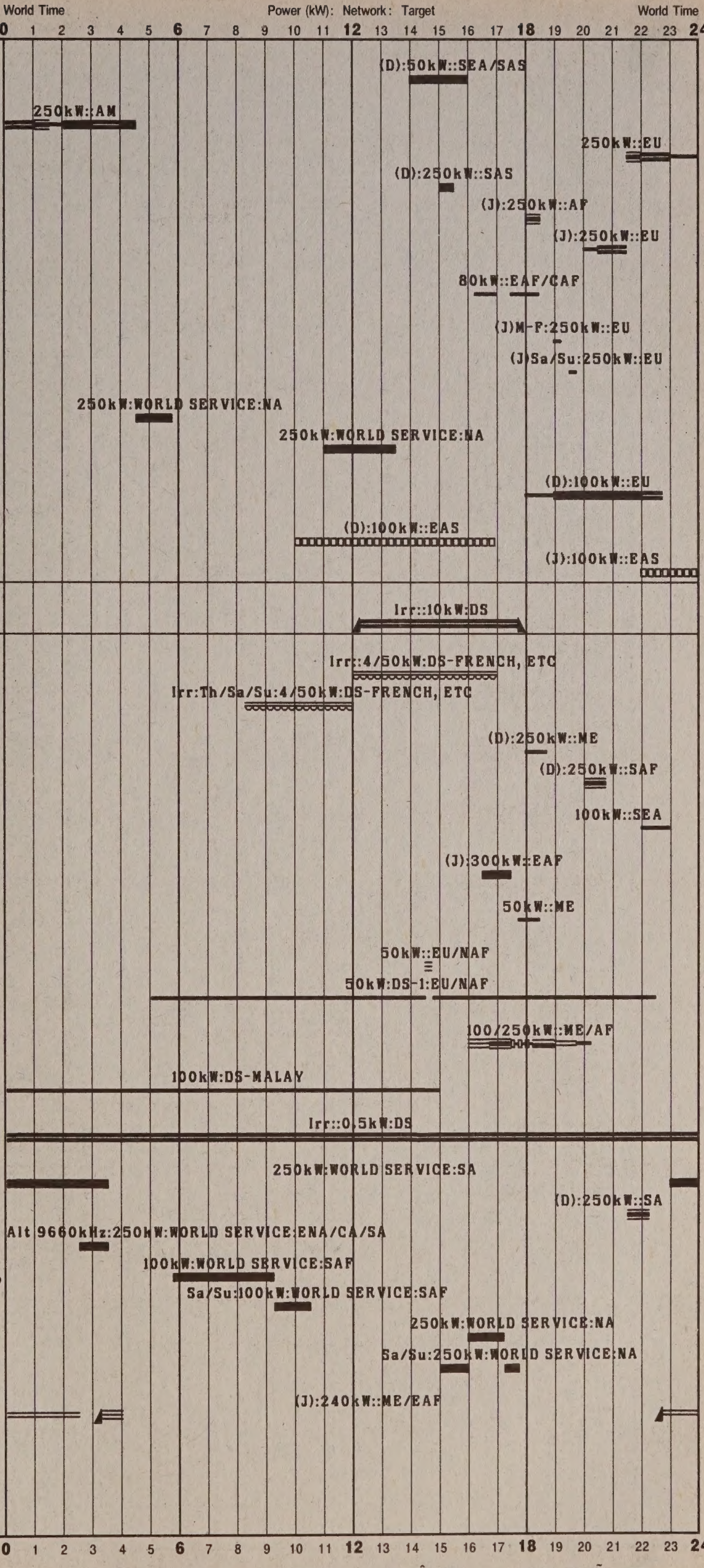
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9510 (con'd)	**PHILIPPINES** FAR EAST BC CO Bocaue	(D):50kW::SEA/SAS
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AM 250kW::EU (D):250kW::SAS (J):250kW::AF (J):250kW::EU
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::EAF/CAF
	SWEDEN IBRA RADIO Via Cyclops, Malta	(J)M-F:250kW::EU (J)Sa/Su:250kW::EU
	UNITED KINGDOM BBC Via Antigua	250kW:WORLD SERVICE:NA
	BBC Via Sackville, Can	250kW:WORLD SERVICE:NA
	USA WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::EU
	USSR +RADIO MOSCOW/RP&P Vladivostok	(D):100kW::EAS
	RADIO MOSCOW/RP&P Vladivostok	(J):100kW::EAS
9510v	**PERU** RADIO AMERICA Lima	Irr::10kW:DS
9515	**BURKINA FASO** RTV BURKINA Ouagadougou	Irr::4/50kW:DS-FRENCH, ETC Irr:Th/Sa/Su:4/50kW:DS-FRENCH, ETC
	GERMANY (FR) DEUTSCHE WELLE Via Sri Lanka	(D):250kW::ME (D):250kW::SAF
	GUAM KTWR-TRANS WORLD R Merizo	100kW::SEA
	HOLLAND RADIO NEDERLAND Via Madagascar	(J):300kW::EAF
	INDIA ALL INDIA RADIO Delhi	50kW::ME
	ITALY RTV ITALIANA Caltanissetta	50kW::EU/NAF 50kW:DS-1:EU/NAF
	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	100/250kW::ME/AF
	MALAYSIA RADIO MALAYSIA Kajang	100kW:DS-MALAY
	MEXICO LV AMERICA LATINA México City	Irr::0.5kW:DS
	UNITED KINGDOM BBC Via Ascension	250kW:WORLD SERVICE:SA (D):250kW::SA
	BBC Via Cincinnati, USA	Alt 9660kHz:250kW:WORLD SERVICE:ENA/CA/SA
	BBC Via Maseru, Lesotho	100kW:WORLD SERVICE:SAF Sa/Su:100kW:WORLD SERVICE:SAF
	BBC Via Sackville, Can	250kW:WORLD SERVICE:NA Sa/Su:250kW:WORLD SERVICE:NA
(con'd)	**USSR** RADIO MOSCOW Kazan'	(J):240kW::ME/EAF



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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9515 (con'd)	**USSR**	
	RADIO MOSCOW/RP&P Leningrad	(D):240kW::NAF/ME
	RADIO MOSCOW/RP&P Yerevan	(J):100kW::EAF
9519v	**PERU**	
	RADIO LA CRONICA Lima	Irr::5kW:DS
9520	**HUNGARY**	
	RADIO BUDAPEST Jászberény	250kW::NA M:250kW::NA M/W/Sa:250kW::NA Th/F/Su-Tu:250kW::NA Tu-Su:250kW::NA Tu/F:250kW::SA W/Sa:250kW::NA
	NORTHERN MARIANA IS	
	KFBS-FAR EAST BC Saipan Island	(J):100kW::SEA
	PAPUA NEW GUINEA	
	NATIONAL BC OF PNG Port Moresby	10kW:TEMP INACTIVE
	SAUDI ARABIA	
	BS OF THE KINGDOM Riyadh	350kW:SOMALI:EAF
	USA	
	RFE-RL Via Germany (FR)	(J):100/250kW::WUSSR
	USSR	
	RADIO MOSCOW Moscow	240kW::ATL
	RADIO MOSCOW/RP&P Irkutsk	(J):240kW::EAS
	+RADIO MOSCOW/RP&P Krasnodar	(D):500kW::CA
	+RADIO MOSCOW/RP&P Krasnodar	(D):500kW:WS:CA/EU
	RADIO MOSCOW/RP&P Vladivostok	250kW::EAS
9525	**CUBA**	
	RADIO HABANA Havana	250kW::WNA
	INDIA	
	ALL INDIA RADIO Madras	100kW:DS-VIVIDH BHARATI
	IRAQ	
	RADIO BAGHDAD Balad-Salah el Deen	500kW
	JAPAN	
	RADIO JAPAN/NHK Tōkyō-Yamata	100kW::SA 100kW::EAS/EUSSR 100kW::SEA (D):100/300kW::WNA
	NORWAY	
	RADIO NORWAY INTL Kvitsøy	(D):500kW::WAF/SA (D)M-Sa:500kW::WAF/SA (D)Su:500kW::WAF/SA (D)Tu-Su:500kW::WAF/SA (D)M:500kW:SPANISH, ETC:WAF/SA
	POLAND	
	RADIO POLONIA Warsaw	100kW::EU/ATL/NA 100kW::EU/WAF 100kW::EU/AF
	USA	
	RADIO MARTI Cincinnati, Ohio	250kW::CA
	VOICE OF AMERICA Cincinnati, Ohio	250kW::CA/SA
9525v	**MOZAMBIQUE**	
	RADIO MOCAMBIQUE Maputo	Irr::120kW::SA

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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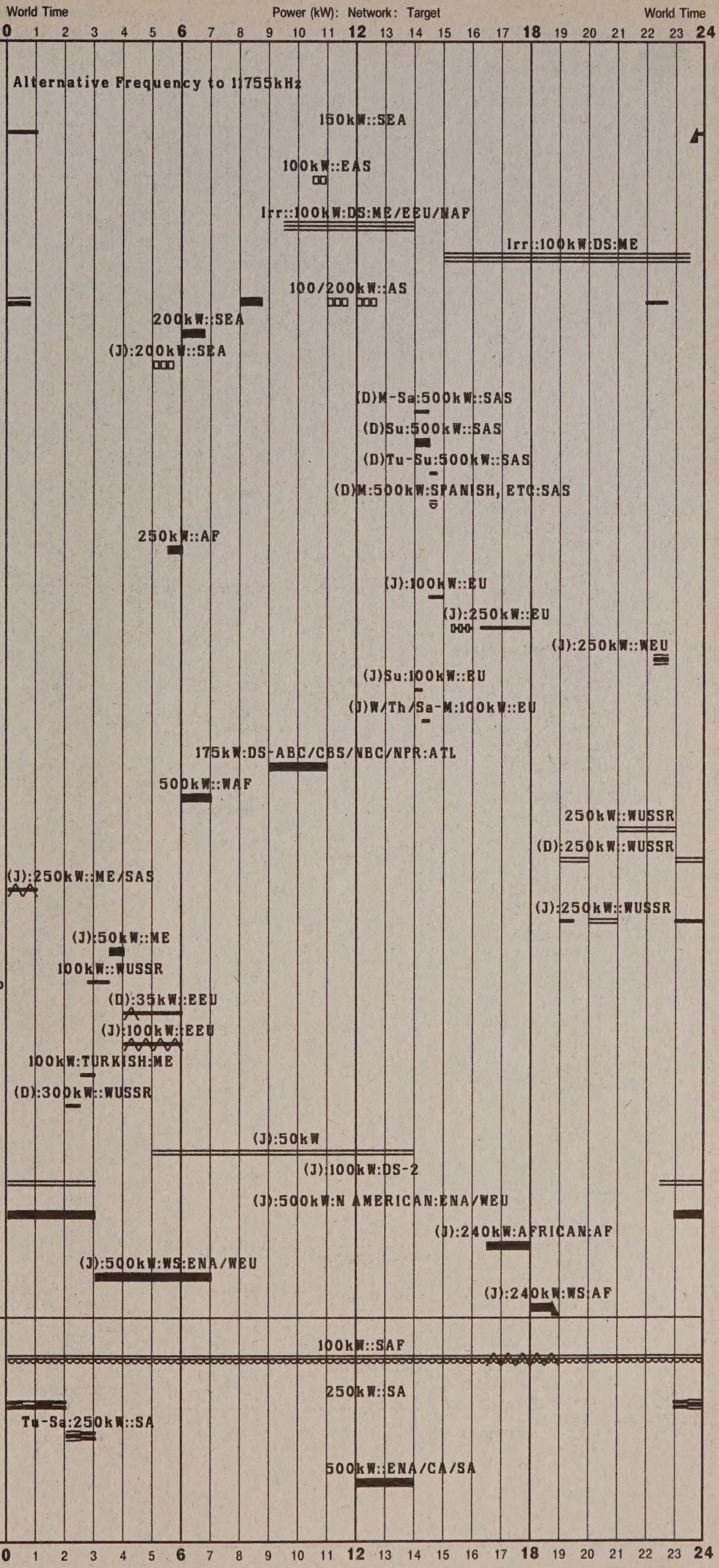
Power (kW): Network: Target



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9530	**AFGHANISTAN** RADIO AFGHANISTAN Via USSR	Alternative Frequency to 11755kHz
	CHINA (PR) RADIO BEIJING Xi'an	150kW::SEA
	GUAM KTWR-TRANS WORLD R Merizo	100kW::EAS
	JORDAN RADIO JORDAN 'Amman	Irr::100kW:DS:ME/EEU/NAF Irr::100kW:DS:ME
	KOREA (DPR) RADIO PYONGYANG Kujang-dong	100/200kW::AS 200kW::SEA
	RADIO PYONGYANG Pyŏngyang	(J):200kW::SEA
	NORWAY RADIO NORWAY INTL Kvitsøy	(D)M-Sa:500kW::SAS (D)Su:500kW::SAS (D)Tu-Su:500kW::SAS (D)M:500kW:SPANISH, ETC:SAS
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AF
	UNITED KINGDOM BBC Skelton, Cumbria	(J):100kW::EU (J):250kW::EU (J):250kW::WEU (J)Su:100kW::EU (J)W/Th/Sa-M:100kW::EU
	USA AFRTS-US MILITARY Cincinnati, Ohio	175kW:DS-ABC/CBS/NBC/NPR:ATL
	VOICE OF AMERICA Greenville, NC	500kW::WAF
	VOICE OF AMERICA Via Kavála, Greece	250kW::WUSSR (D):250kW::WUSSR (J):250kW::ME/SAS (J):250kW::WUSSR
	VOICE OF AMERICA Via Rhodes, Greece	(J):50kW::ME
	VOICE OF AMERICA Via Tangier,Morocco	100kW::WUSSR (D):35kW::EEU (J):100kW::EEU 100kW:TURKISH:ME
	VOICE OF AMERICA Via Woofferton, UK	(D):300kW::WUSSR
	USSR RADIO MOSCOW Irkutsk	(J):50kW
	RADIO MOSCOW Tula	(J):100kW:DS-2
	RADIO MOSCOW/RP&P Moscow	(J):500kW:N AMERICAN:ENA/WEU (J):240kW:AFRICAN:AF (J):500kW:WS:ENA/WEU (J):240kW:WS:AF
9535	**ANGOLA** RADIO NACIONAL Luanda	100kW::SAF
	CANADA RADIO CANADA INTL Sackville, NB	250kW::SA Tu-Sa:250kW::SA
(con'd)	**CHINA (PR)** RADIO BEIJING Jinhua	500kW::ENA/CA/SA

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SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9535 (con'd)	**FRANCE**	
	RADIO FRANCE INTL Issoudun-Allouis	100kW::ME/EAF
	RADIO FRANCE INTL Via French Guiana	500kW::SA
	JAPAN	
	NIPPON HOSO KYOKAI Fukuoka-Kasuga	Irr::0.6kW:USB:DS-1
	NIPPON HOSO KYOKAI Hiroshima-Gion	Irr::0.6kW:DS-1
	NIPPON HOSO KYOKAI Matsuyama-Harita	Irr::0.6kW:DS-1
	NIPPON HOSO KYOKAI Nagoya-Nabeta	Irr::0.3kW:USB:DS-1
	NIPPON HOSO KYOKAI Sapporo	Irr::0.6kW:DS-1
	NIPPON HOSO KYOKAI Sendai-Haramachi	Irr::0.3kW:DS-1
	NETHERLANDS ANTILLES	
	TRANS WORLD RADIO Bonaire	50kW::NA 250kW::SA Su/M:50kW::NA Tu-Sa:50kW::CA
	SWITZERLAND	
	RED CROSS BC SVC Schwarzenburg	Irr:(D)M/Th:150kW:FRENCH, ENGLISH:AF
	SWISS BC CORP Lenk	(D):250kW:DS-RSI:EU (D):250kW:DS-RSR:EU
	SWISS BC CORP Sarnen	(J):250kW:DS-DRS:EU (J):250kW:DS-RSI:EU (J):250kW:DS-RSR:EU
	SWISS RADIO INTL Lenk	(D):250kW::EU
	SWISS RADIO INTL Sarnen	(J):250kW::EU (J)M-F:250kW::EU (J)Sa/Su:250kW::EU
	SWISS RADIO INTL Schwarzenburg	(D):150kW::AF (D):150kW::WEU (D)M-Sa:150kW::AF (D)Su:150kW::AF
	USA	
	WYFR-FAMILY RADIO Okeechobee,Florida	(J):100kW::ENA
9540	**CHINA (PR)**	
	VO THE STRAIT-PLA Fuzhou	15kW:TAIWAN-2
	CZECHOSLOVAKIA	
	RADIO PRAGUE	(J):::NA/CA
	HOLLAND	
	RADIO NEDERLAND Via Madagascar	300kW::AF (J):300kW::EAF
	ISRAEL	
	KOL ISRAEL Tel Aviv	(D):7.5kW::EU
	NEW ZEALAND	
	RADIO NEW ZEALAND Wellington	(J):7.5kW::PAC (J):7.5kW:ENGLISH, ETC:PAC
	NORWAY	
	RADIO NORWAY INTL Kvitsøy	(J):500kW::EAF
	PHILIPPINES	
	RADIO VERITAS ASIA Malolos	100kW::SEA
	POLAND	
	RADIO POLONIA Warsaw	100kW::EU
	SOUTH AFRICA	
	RADIO RSA Meyerton	(J):250kW::SA
	SWAZILAND	
(con'd)	TRANS WORLD RADIO Manzini	25/100kW::EAF

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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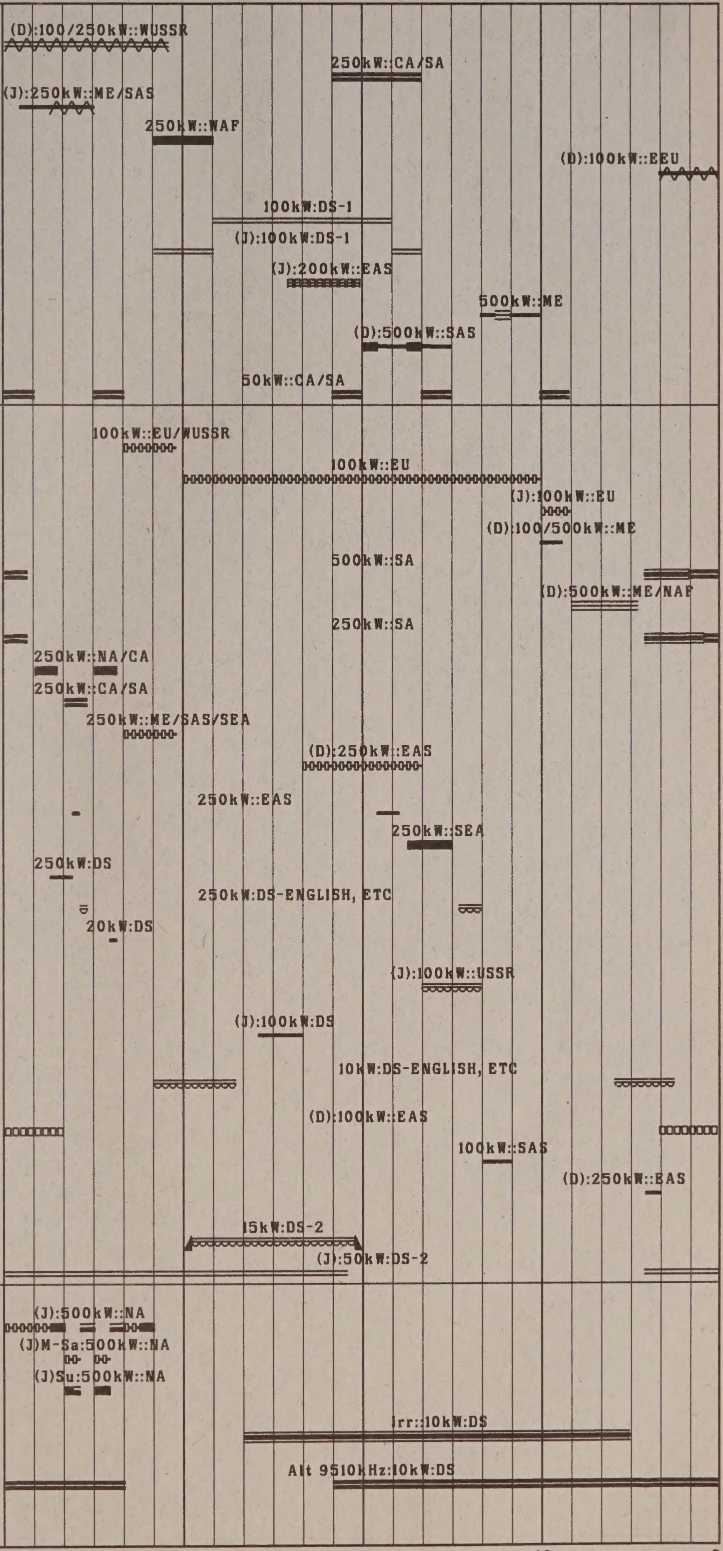

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9540 (con'd)	USA	
	RFE-RL Via Germany (FR)	(D):100/250kW::WUSSR
	VOICE OF AMERICA Dixon, California	250kW::CA/SA
	VOICE OF AMERICA Via Kaválla, Greece	(J):250kW::ME/SAS
	VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF
	VOICE OF AMERICA Via Tangier,Morocco	(D):100kW::EEU
	USSR	
	RADIO MOSCOW Moscow	100kW:DS-1 (J):100kW:DS-1
	RADIO MOSCOW/RP&P Petropavlovsk-Kam	(J):200kW::EAS
	RADIO TASHKENT Tashkent	500kW::ME (D):500kW::SAS
	VENEZUELA	
	RADIO NACIONAL Caracas	50kW::CA/SA
9545	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	100kW::EU/WUSSR 100kW::EU (J):100kW::EU
	DEUTSCHE WELLE Jülich/Türkheim-W'l	(D):100/500kW::ME
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::SA (D):500kW::ME/NAF
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::SA 250kW::NA/CA 250kW::CA/SA 250kW::ME/SAS/SEA
	DEUTSCHE WELLE Via Sri Lanka	(D):250kW::EAS
	INDIA	
	ALL INDIA RADIO Aligarh	250kW::EAS 250kW::SEA 250kW:DS 250kW:DS-ENGLISH, ETC
	ALL INDIA RADIO Delhi	20kW:DS
	NORTHERN MARIANA IS	
	KFBS-FAR EAST BC Saipan Island	(J):100kW::USSR
	PAKISTAN	
	PAKISTAN BC CORP Islamabad	(J):100kW:DS
	SOLOMON IS	
	SOLOMON ISLANDS BC Honiara	10kW:DS-ENGLISH, ETC
	USA	
	VOICE OF AMERICA Via Philippines	(D):100kW::EAS 100kW::SAS (D):250kW::EAS
	USSR	
	BELORUSSIAN RADIO Minsk	15kW:DS-2
	RADIO MOSCOW Khabarovsk	(J):50kW:DS-2
9550	AUSTRIA	
	RADIO AUSTRIA INTL Vienna	(J):500kW::NA (J)M-Sa:500kW::NA (J)Su:500kW::NA
	BRAZIL	
	RADIO PAMPA Pôrto Alegre	Irr::10kW:DS
	CHILE	
(con'd)	R SISTEMA NACIONAL Santiago	Alt 9510kHz:10kW:DS

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9550 (con'd)	CHILE R SISTEMA NACIONAL Santiago	Alt 9510kHz:M-Sa:10kW:DS
	CHINA (PR) RADIO BEIJING	NA
	RADIO BEIJING Jinhua	(D):500kW::WNA
	CLANDESTINE (AFRICA) "RADIO SPLA" Bantu Liben, Ethi'a	100kW:ANTI-SUDANESE GOVT:NAF
	"SUDAN PEOPLE AFP" Sudan	PRO-SUDANESE ARMY:NAF
	CUBA RADIO HABANA Havana	50kW::CA 50kW::SA
	RADIO HABANA Via USSR	Alternative Frequency to 9720kHz
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EEU/ME (D):100kW::EEU/ME (J):100kW::EEU/ME
	INDIA ALL INDIA RADIO Aligarh	250kW::ME
	ALL INDIA RADIO Delhi	100kW::ANZ
	JAPAN NIPPON HOSO KYOKAI Tōkyō-Shōbu	Irr::0.9kW:USB:DS(FEEDER)
	LIBERIA RADIO ELWA Monrovia	50kW::WAF
	PHILIPPINES RADIO VERITAS ASIA Malolos	100kW::SEA
	SWAZILAND TRANS WORLD RADIO Manzini	100kW::EAF
	UNITED ARAB EMIRATES +UAE RADIO Dubai	(D):300kW
	USA VOICE OF AMERICA Cincinnati, Ohio	250kW::WAF
	VOICE OF AMERICA Via M'rovia, Liberia	250kW::CAF/EAF
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::SA
	USSR RADIO MOSCOW Moscow	(J):240kW:MARINERS:ATL
	+RADIO MOSCOW/RP&P Moscow	(D):120kW::SAS/SEA
9553v	EQUATORIAL GUINEA RADIO NACIONAL Batá	Irr::50kW::WAF
9555	CANADA RADIO CANADA INTL Via United Kingdom	(D):300kW::EU (J):300kW::EU M-F/:300kW::EU Sa/Su/:300kW::EU
	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(D):100kW::SA (D):100kW::NA
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	(J):200kW::SEA
	MEXICO LA HORA EXACTA México City	Irr::0.5kW:DS
	USA RFE-RL Via Germany (FR)	(J):250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	50/250kW::WUSSR 50/250kW::EEU (D):50/250kW::WUSSR
(con'd)		

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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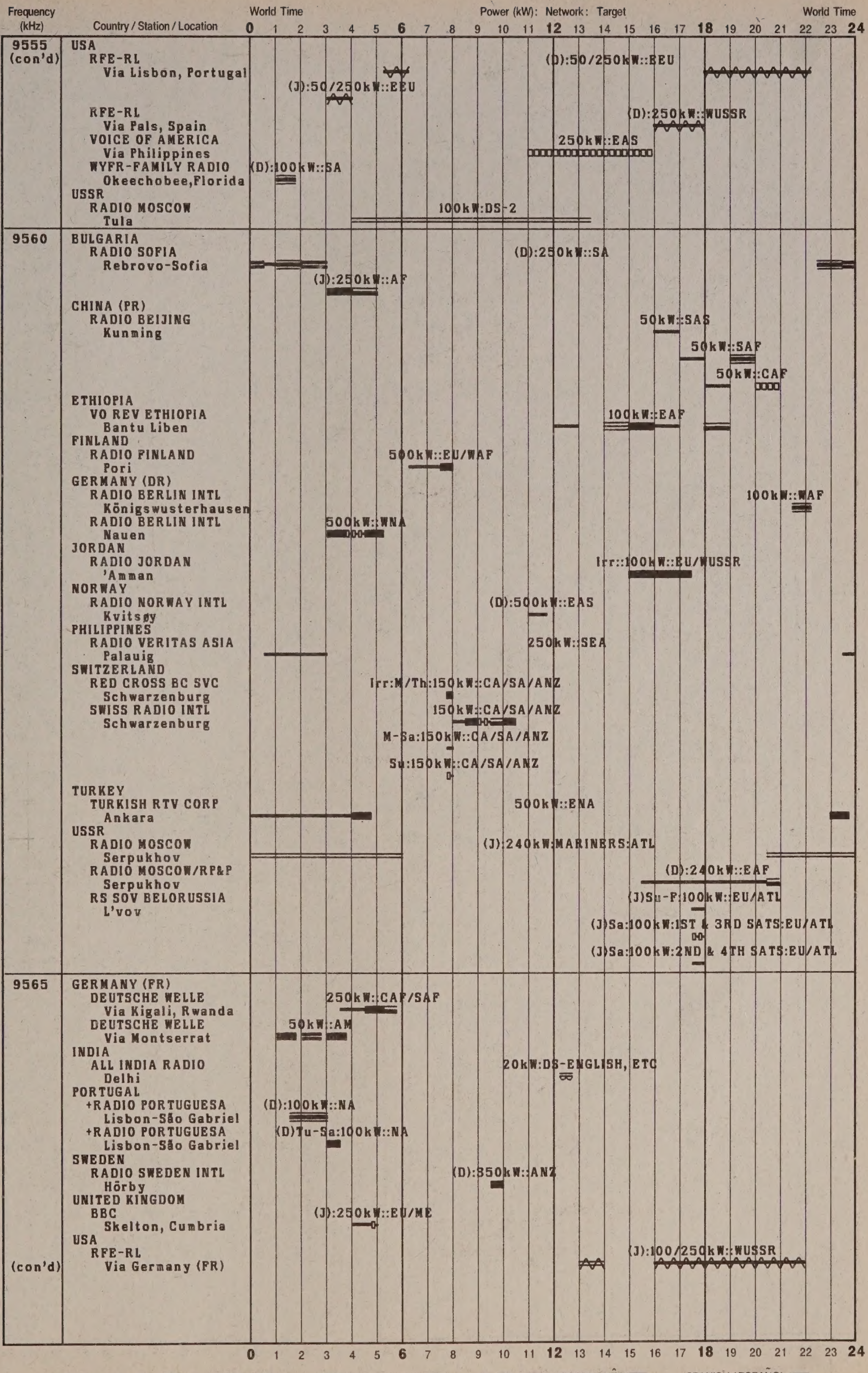

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9555 (con'd)	USA	
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU (J):50/250kW::EEU
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	VOICE OF AMERICA Via Philippines	250kW::EAS
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::SA
	USSR	
	RADIO MOSCOW Tula	100kW:DS-2
9560	BULGARIA	
	RADIO SOFIA Rebrovo-Sofia	(D):250kW::SA (J):250kW::AF
	CHINA (PR)	
	RADIO BEIJING Kunming	50kW::SAS 50kW::SAF 50kW::CAF
	ETHIOPIA	
	VO REV ETHIOPIA Bantu Liben	100kW::EAF
	FINLAND	
	RADIO FINLAND Pori	500kW::EU/WAF
	GERMANY (DR)	
	RADIO BERLIN INTL Königswusterhausen	100kW::WAF
	RADIO BERLIN INTL Nauen	500kW::WNA
	JORDAN	
	RADIO JORDAN 'Amman	Irr::100kW::EU/WUSSR
	NORWAY	
	RADIO NORWAY INTL Kvitsøy	(D):500kW::EAS
	PHILIPPINES	
	RADIO VERITAS ASIA Palauig	250kW::SEA
	SWITZERLAND	
	RED CROSS BC SVC Schwarzenburg	Irr:M/Th:150kW::CA/SA/ANZ
	SWISS RADIO INTL Schwarzenburg	150kW::CA/SA/ANZ M-Sa:150kW::CA/SA/ANZ Su:150kW::CA/SA/ANZ
	TURKEY	
	TURKISH RTV CORP Ankara	500kW::ENA
	USSR	
	RADIO MOSCOW Serpukhov	(J):240kW:MARINERS:ATL
	RADIO MOSCOW/RP&P Serpukhov	(D):240kW::EAF
	RS SOV BELORUSSIA L'vov	(J)Su-F:100kW::EU/ATL (J)Sa:100kW:1ST & 3RD SATS:EU/ATL (J)Sa:100kW:2ND & 4TH SATS:EU/ATL
9565	GERMANY (FR)	
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::CAF/SAF
	DEUTSCHE WELLE Via Montserrat	50kW::AM
	INDIA	
	ALL INDIA RADIO Delhi	20kW:DS-ENGLISH, ETC
	PORTUGAL	
	+RADIO PORTUGUESA Lisbon-São Gabriel	(D):100kW::NA
	+RADIO PORTUGUESA Lisbon-São Gabriel	(D)Tu-Sa:100kW::NA
	SWEDEN	
	RADIO SWEDEN INTL Hörby	(D):350kW::ANZ
	UNITED KINGDOM	
	BBC Skelton, Cumbria	(J):250kW::EU/ME
	USA	
(con'd)	RFE-RL Via Germany (FR)	(J):100/250kW::WUSSR

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World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9565 (con'd)	USA RFE-RL Via Pals, Spain	250kW::WUSSR (D):250kW::WUSSR
	VOICE OF AMERICA Greenville, NC	250/500kW::NAF M-F:250/500kW::NAF
	VOICE OF AMERICA Via Kavàlla, Greece	(J):250kW::WUSSR
	VOICE OF AMERICA Via Rhodes, Greece	(J):50kW:TURKISH:ME
	VOICE OF AMERICA Via Woofferton, UK	(D):250kW::WUSSR (J):250kW::WUSSR (J):300kW:GREEK:EU
	VOICE OF THE OAS Cincinnati, Ohio	175kW::CA/SA
	USSR RADIO MOSCOW/RP&P Irkutsk	(J):240kW:JAPANESE,KOREAN:EAS
9565v	BRAZIL RADIO UNIVERSO Curitiba	7.5kW:DS
9570	CHINA (PR) RADIO BEIJING Xi'an	300kW::SA 300kW::EAF/SAF
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::ME/SAS/SEA
	JAPAN RADIO JAPAN/NHK Via Moyabi, Gabon	250kW::EU
	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	100kW::WNA/CA 100kW::SA 100kW::SEA
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AM 250kW::AF (J):250kW::EU (J)Su:250kW:MARINERS:ATL
	SAUDI ARABIA BS OF THE KINGDOM Jiddah	50kW:DS-2:ME/EAF
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::EU
	USA RADIO MARTI Cincinnati, Ohio	(J):250kW::CA
	VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR
	USSR RADIO MOSCOW Minsk	240kW:DS-3
9572	CHILE R DIEGO PORTALES Santiago	Irr::1kW:DS
9575	AFGHANISTAN RADIO AFGHANISTAN Via USSR	ME
	CHINA (PR) RADIO BEIJING	AS
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	SEA
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::NAF/EAF
	IRAN VO THE ISLAMIC REP Tehrān	500kW::EU 500kW::ME
(con'd)	ITALY RTV ITALIANA Rome	100kW::SA

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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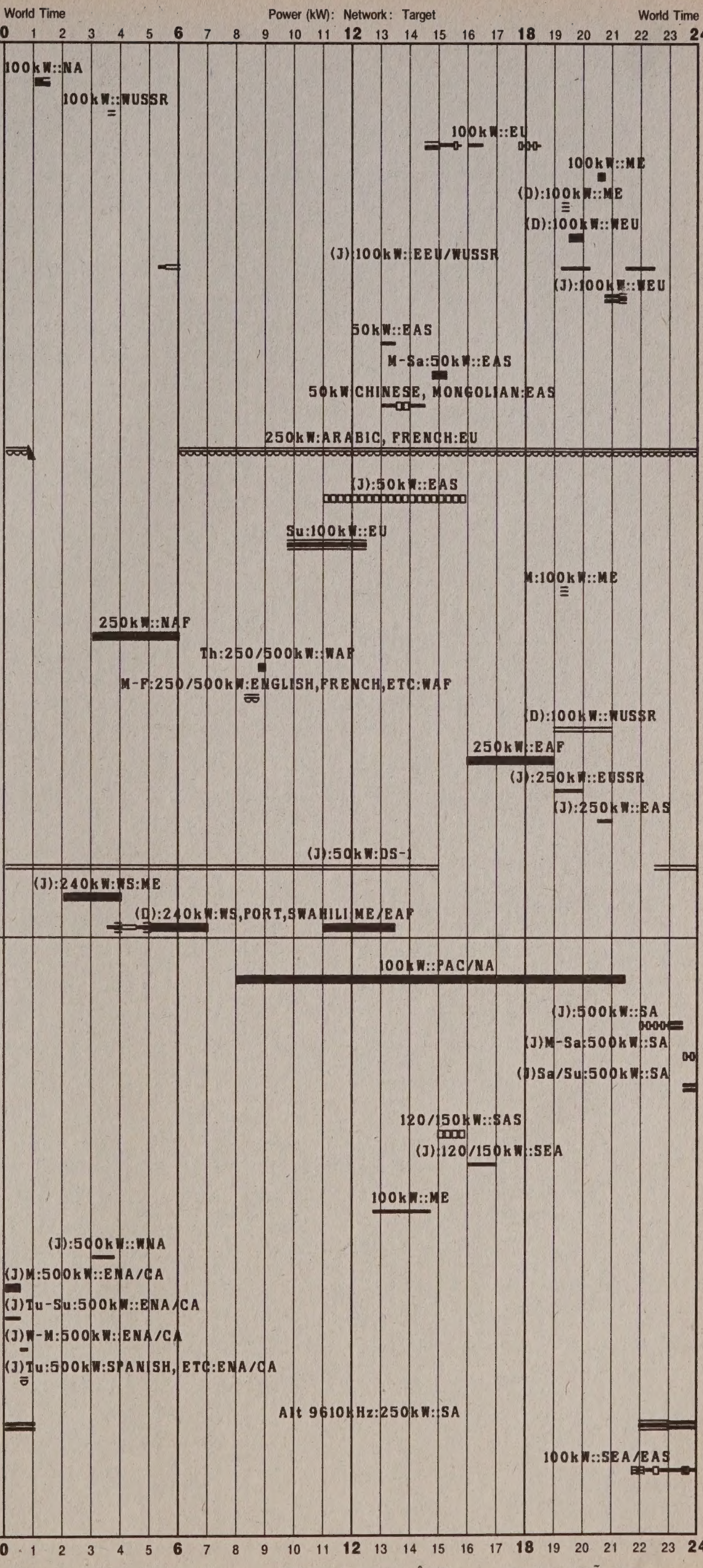
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9575 (con'd)	ITALY RTV ITALIANA Rome	100kW::NA 100kW::WUSSR 100kW::EU 100kW::ME (D):100kW::ME (D):100kW::WEU (J):100kW::EEU/WUSSR (J):100kW::WEU
	MONGOLIA RADIO ULAN BATOR Ulan Bator	50kW::EAS M-Sa:50kW::EAS 50kW:CHINESE, MONGOLIAN:EAS
	MOROCCO RADIO MEDI UN Nador	250kW:ARABIC, FRENCH:EU
	PHILIPPINES FAR EAST BC CO Bocaue	(J):50kW::EAS
	PORTUGAL RADIO RENASCENCA Muge	Su:100kW::EU
	UNITED NATIONS UNITED NATIONS R Via Rome, Italy	M:100kW::ME
	USA VOICE OF AMERICA Cincinnati, Ohio	250kW::NAF
	VOICE OF AMERICA Greenville, NC	Th:250/500kW::WAF M-F:250/500kW:ENGLISH,FRENCH,ETC:WAF
	VOICE OF AMERICA Via Ismaning, GFR	(D):100kW::WUSSR
	VOICE OF AMERICA Via Philippines	250kW::EAF (J):250kW::EUSSR (J):250kW::EAS
	USSR RADIO MOSCOW Irkutsk	(J):50kW:DS-1
	RADIO MOSCOW/RP&P Serpukhov	(J):240kW:WS:ME (D):240kW:WS,PORT,SWAHILI:ME/EAF
9580	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC/NA
	AUSTRIA RADIO AUSTRIA INTL Vienna	(J):500kW::SA (J)M-Sa:500kW::SA (J)Sa/Su:500kW::SA
	CHINA (PR) RADIO BEIJING Xi'an	120/150kW::SAS (J):120/150kW::SEA
	EGYPT RADIO CAIRO Abu Za'bal	100kW::ME
	NORWAY RADIO NORWAY INTL Sveio	(J):500kW::WNA (J)M:500kW::ENA/CA (J)Tu-Su:500kW::ENA/CA (J)W-M:500kW::ENA/CA (J)Tu:500kW:SPANISH, ETC:ENA/CA
	SOUTH AFRICA RADIO RSA Meyerton	Alt 9610kHz:250kW::SA
(con'd)	UNITED KINGDOM BBC Via Singapore	100kW::SEA/EAS



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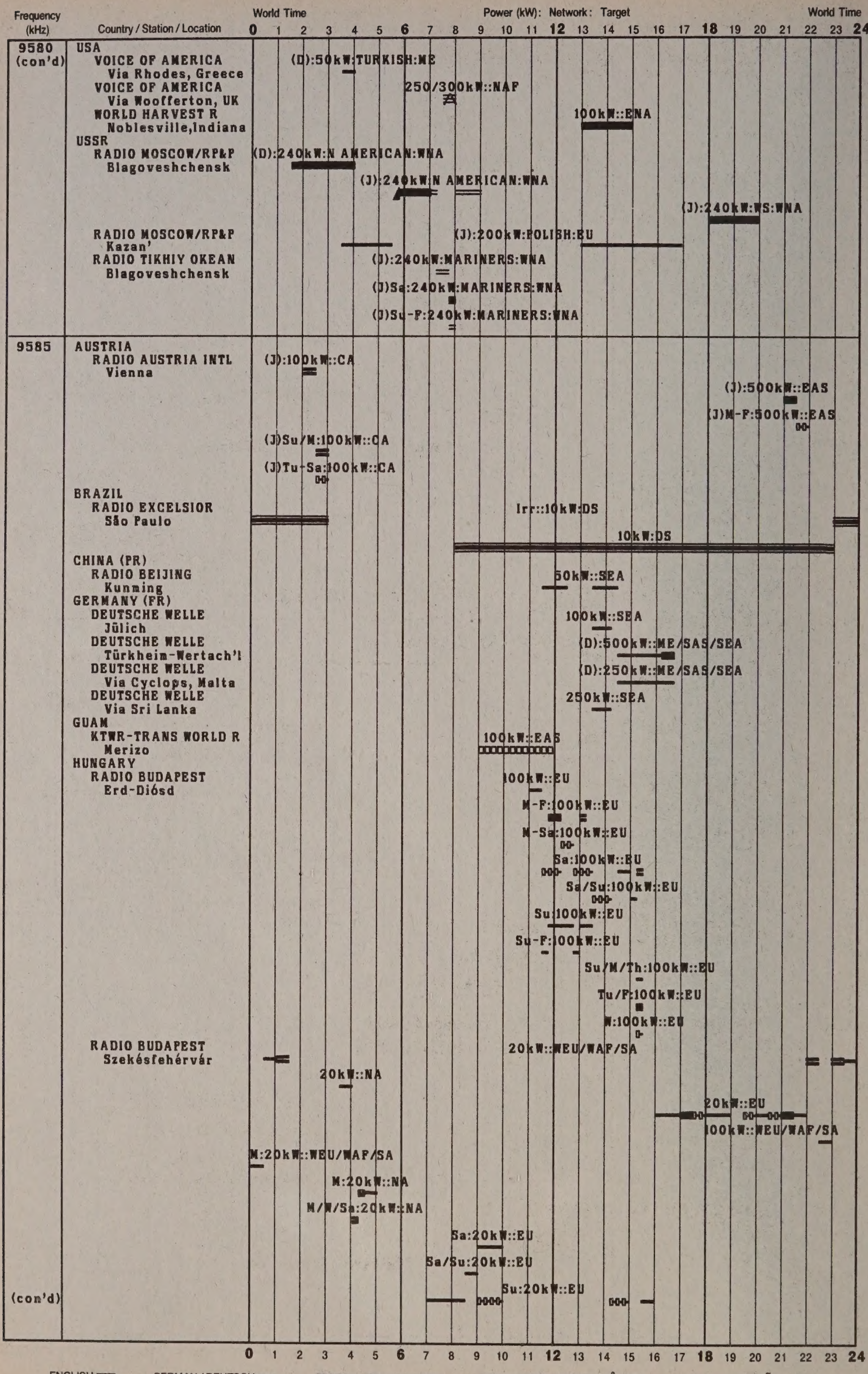

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9580 (con'd)	**USA**	
	VOICE OF AMERICA Via Rhodes, Greece	(D):50kW:TURKISH:ME
	VOICE OF AMERICA Via Woofferton, UK	250/300kW::NAF
	WORLD HARVEST R Noblesville,Indiana	100kW::ENA
	USSR	
	RADIO MOSCOW/RP&P Blagoveshchensk	(D):240kW:N AMERICAN:WNA (J):240kW:N AMERICAN:WNA (J):240kW:WS:WNA
	RADIO MOSCOW/RP&P Kazan'	(J):200kW:POLISH:EU
	RADIO TIKHIY OKEAN Blagoveshchensk	(J):240kW:MARINERS:WNA (J)Sa:240kW:MARINERS:WNA (J)Su-F:240kW:MARINERS:WNA
9585	**AUSTRIA**	
	RADIO AUSTRIA INTL Vienna	(J):100kW::CA (J):500kW::EAS (J)M-F:500kW::EAS (J)Su/M:100kW::CA (J)Tu-Sa:100kW::CA
	BRAZIL	
	RADIO EXCELSIOR São Paulo	Irr::10kW:DS 10kW:DS
	CHINA (PR)	
	RADIO BEIJING Kunming	50kW::SEA
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	100kW::SEA
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::ME/SAS/SEA
	DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::ME/SAS/SEA
	DEUTSCHE WELLE Via Sri Lanka	250kW::SEA
	GUAM	
	KTWR-TRANS WORLD R Merizo	100kW::EAS
	HUNGARY	
	RADIO BUDAPEST Erd-Diósd	100kW::EU M-F:100kW::EU M-Sa:100kW::EU Sa:100kW::EU Sa/Su:100kW::EU Su:100kW::EU Su-F:100kW::EU Su/M/Th:100kW::EU Tu/F:100kW::EU W:100kW::EU
	RADIO BUDAPEST Székesfehérvár	20kW::WEU/WAF/SA 20kW::NA 20kW::EU 100kW::WEU/WAF/SA M:20kW::WEU/WAF/SA M:20kW::NA M/W/Sa:20kW::NA Sa:20kW::EU Sa/Su:20kW::EU Su:20kW::EU
(con'd)		

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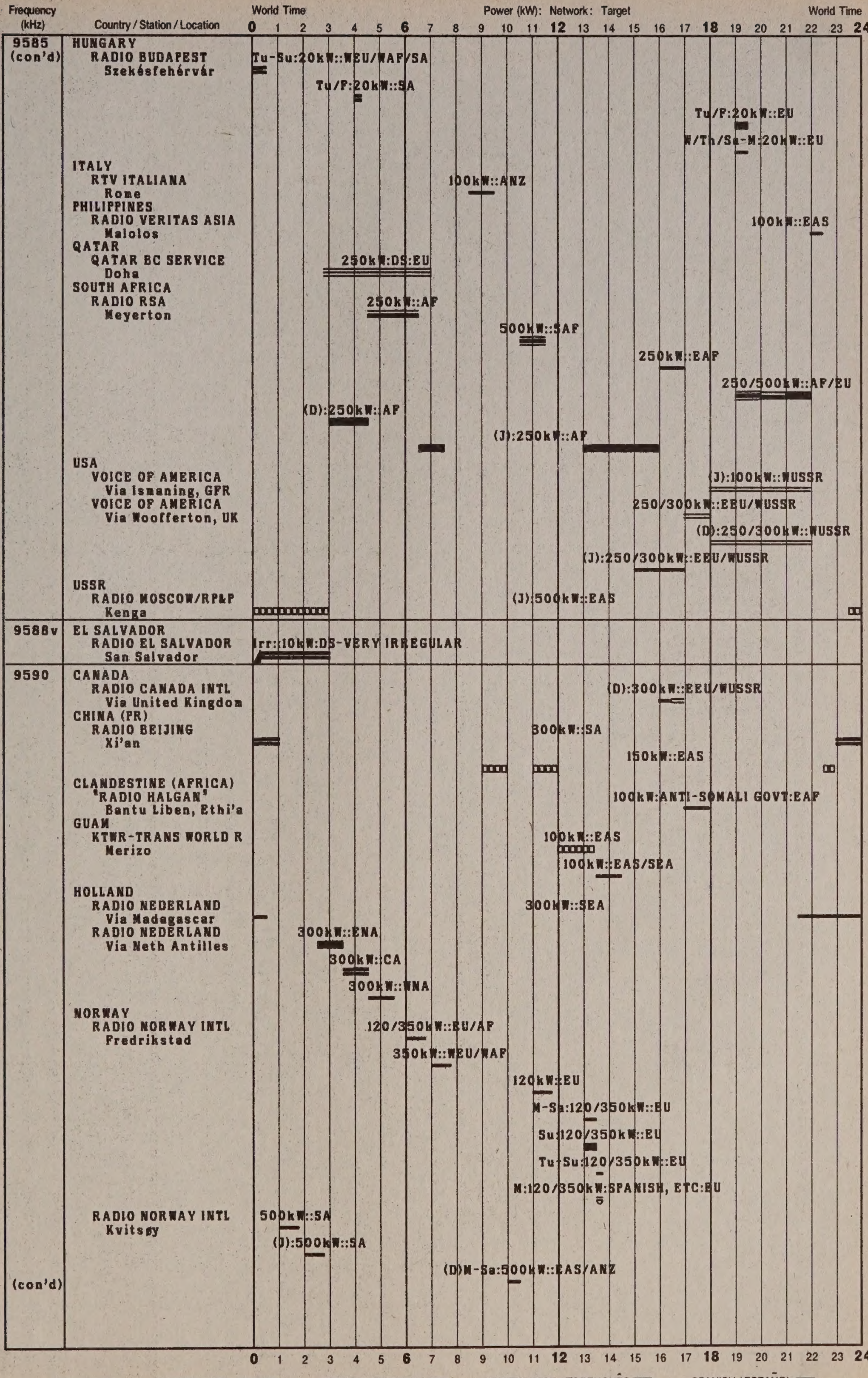


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9585 (con'd)	HUNGARY RADIO BUDAPEST Székésfehérvár	Tu-Su:20kW::WEU/WAF/SA
		Tu/F:20kW::SA
		Tu/F:20kW::EU
		W/Th/Sa-M:20kW::EU
	ITALY RTV ITALIANA Rome	100kW::ANZ
	PHILIPPINES RADIO VERITAS ASIA Malolos	100kW::EAS
	QATAR QATAR BC SERVICE Doha	250kW:DS:EU
	SOUTH AFRICA RADIO RSA Meyerton	250kW::AF
		500kW::SAF
		250kW::EAF
		250/500kW::AF/EU
		(D):250kW::AF
		(J):250kW::AF
	USA VOICE OF AMERICA Via Ismaning, GFR	(J):100kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	250/300kW::EEU/WUSSR
		(D):250/300kW::WUSSR
		(J):250/300kW::EEU/WUSSR
	USSR RADIO MOSCOW/RP&P Kenga	(J):500kW::EAS
9588v	EL SALVADOR RADIO EL SALVADOR San Salvador	Irr::10kW:DS-VERY IRREGULAR
9590	CANADA RADIO CANADA INTL Via United Kingdom	(D):300kW::EEU/WUSSR
	CHINA (PR) RADIO BEIJING Xi'an	300kW::SA
		150kW::EAS
	CLANDESTINE (AFRICA) "RADIO HALGAN" Bantu Liben, Ethi'a	100kW:ANTI-SOMALI GOVT:EAF
	GUAM KTWR-TRANS WORLD R Merizo	100kW::EAS
		100kW::EAS/SEA
	HOLLAND RADIO NEDERLAND Via Madagascar	300kW::SEA
	RADIO NEDERLAND Via Neth Antilles	300kW::ENA
		300kW::CA
		300kW::WNA
	NORWAY RADIO NORWAY INTL Fredrikstad	120/350kW::EU/AF
		350kW::WEU/WAF
		120kW::EU
		M-Sa:120/350kW::EU
		Su:120/350kW::EU
		Tu-Su:120/350kW::EU
		M:120/350kW:SPANISH, ETC:EU
	RADIO NORWAY INTL Kvitsøy	500kW::SA
		(J):500kW::SA
(con'd)		(D)M-Sa:500kW::EAS/ANZ

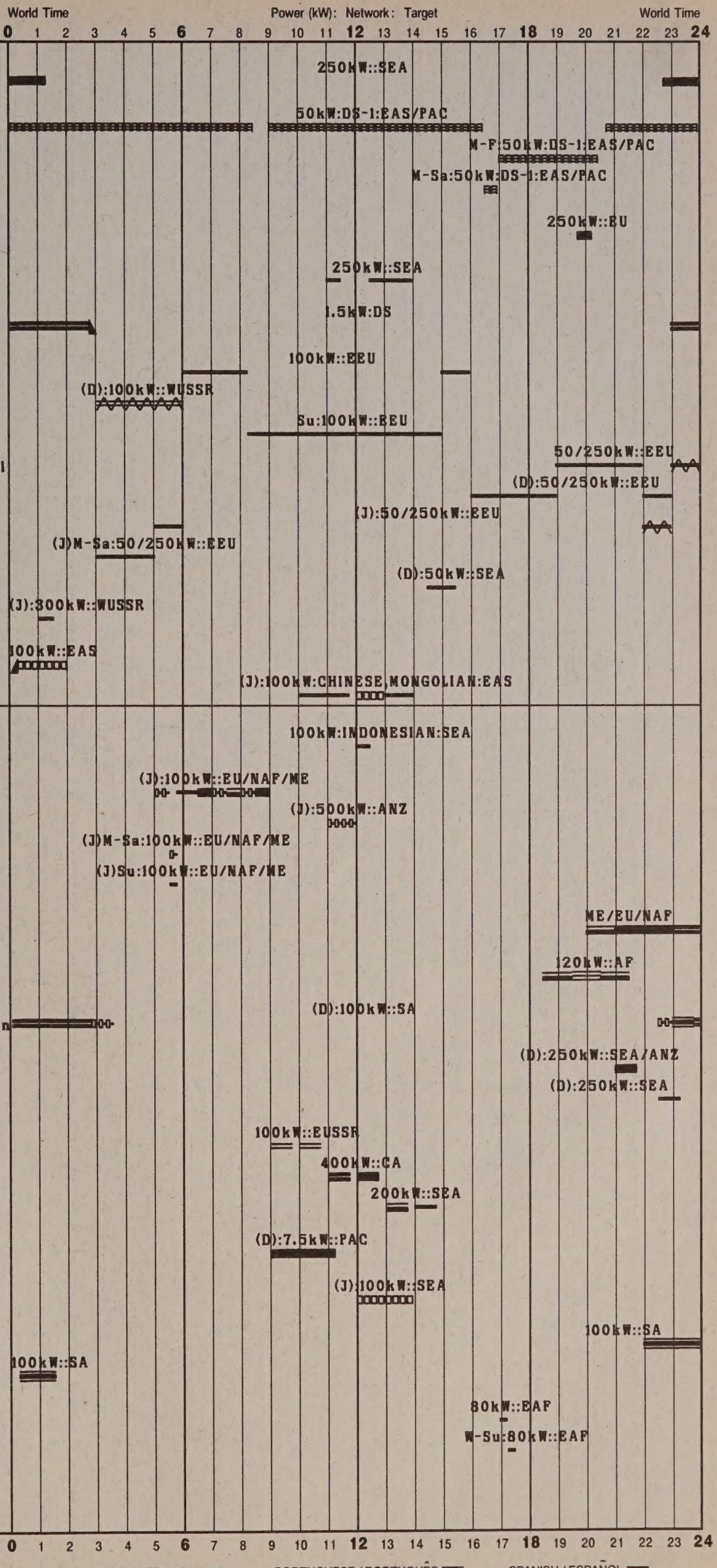
ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ═
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 — Power (kW): Network: Target
9590 (con'd)	NORWAY RADIO NORWAY INTL Kvitsøy	Alt 7290kHz:(D)M-Sa:500kW::SAS (D)M-Sa:500kW::EU/AF (J)M-Sa:500kW::EU (D)M:500kW::ME/EAF (D)Su:500kW::EAS/ANZ Alt 7290kHz:(D)Su:500kW::SAS (D)Su:500kW::EU/AF (J)Su:500kW::EU (D)Tu-Su:500kW::ME/EAF (D)Tu-Su:500kW::EAS/ANZ Alt 7290kHz:(D)Tu-Su:500kW::SAS (D)Tu-Su:500kW::EU/AF (J)Tu-Su:500kW::EU (D)W-M:500kW::ME/EAF (D)M:500kW:SPANISH, ETC:EAS/ANZ Alt 7290kHz:(D)M:500kW:SPANISH, ETC:SAS (D)M:500kW:SPANISH, ETC:EU/AF (J)M:500kW:SPANISH, ETC:EU (D)Tu:500kW:SPANISH, ETC:ME/EAF
	RADIO NORWAY INTL Sveio	(D)M-Sa:500kW::WNA (D)Su:500kW::WNA (D)Tu-Su:500kW::WNA (D)M:500kW:SPANISH, ETC:WNA
	ROMANIA RADIO BUCHAREST Bucharest	250kW::ME 250kW::AF/ME (J):250kW::ME Su:250kW:MARINERS:WEU/ATL
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::SAS
	SWEDEN IBRA RADIO Via Sines, Portugal	(J):250kW:ARABIC,RUSSIAN,ETC
	SWITZERLAND SWISS RADIO INTL Sottens	500kW::WAF
	UNITED KINGDOM BBC Via Cincinnati, USA	250kW:WS:ENA/CA/SA
	BBC Via Sackville, Can	250kW:WS:NA
	USA RADIO MARTI Cincinnati, Ohio	(D):250kW::CA
	VOICE OF AMERICA Via Woofferton, UK	(J):250kW::WUSSR
9595	BULGARIA RADIO SOFIA Rebrovo-Sofia	(D):250kW::NAF/WAF
	CANADA RADIO CANADA INTL Via Tōkyō, Japan	50kW::EAS/PAC
	CHINA (PR) XINJIANG PBS Urümqi	50kW:DS
	ETHIOPIA 'RADIO FREEDOM' Via Vo Rev Ethiopia	100kW:ANC/ENGLISH, ETC:SAF
	'VOICE OF NAMIBIA' Via Vo Rev Ethiopia	100kW:SWAPO/ENGLISH, ETC:SAF
	ICELAND RIKISUTVARPID Reykjavik	Sa:10kW:USB:DS-1:ATL/EU Su-F:10kW:USB:DS-1:ATL/EU
(con'd)		

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9595 (con'd)	**INDIA**	
	ALL INDIA RADIO Aligarh	250kW::SEA
	JAPAN	
	NIHON SHORTWAVE BC Tōkyō-Nagara	50kW:DS-1:EAS/PAC M-F:50kW:DS-1:EAS/PAC M-Sa:50kW:DS-1:EAS/PAC
	MONGOLIA	
	RADIO ULAN BATOR Ulan Bator	250kW::EU
	PHILIPPINES	
	RADIO VERITAS ASIA Palauig	250kW::SEA
	URUGUAY	
	RADIO MONTE CARLO Montevideo	1.5kW:DS
	USA	
	RFE-RL Via Germany (FR)	100kW::EEU (D):100kW::WUSSR Su:100kW::EEU
	RFE-RL Via Lisbon, Portugal	50/250kW::EEU (D):50/250kW::EEU (J):50/250kW::EEU (J)M-Sa:50/250kW::EEU
	VOICE OF AMERICA Via Philippines	(D):50kW::SEA
	VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR
	USSR	
	RADIO MOSCOW/RP&P Novosibirsk	100kW::EAS (J):100kW:CHINESE,MONGOLIAN:EAS
9600	**ALBANIA**	
	RADIO TIRANA Lushnjë	100kW:INDONESIAN:SEA
	AUSTRIA	
	RADIO AUSTRIA INTL Vienna	(J):100kW::EU/NAF/ME (J):500kW::ANZ (J)M-Sa:100kW::EU/NAF/ME (J)Su:100kW::EU/NAF/ME
	CHINA (TAIWAN)	
	VOICE FREE CHINA T'ai-pei	ME/EU/NAF
	CZECHOSLOVAKIA	
	RADIO PRAGUE Pieštány-Velké K'y	120kW::AF
	GERMANY (DR)	
	RADIO BERLIN INTL Königswusterhausen	(D):100kW::SA
	GERMANY (FR)	
	DEUTSCHE WELLE Via Sri Lanka	(D):250kW::SEA/ANZ (D):250kW::SEA
	KOREA (DPR)	
	RADIO PYONGYANG Pyŏngyang	100kW::EUSSR 400kW::CA 200kW::SEA
	NEW ZEALAND	
	RADIO NEW ZEALAND Wellington	(D):7.5kW::PAC
	NORTHERN MARIANA IS	
	KFBS-FAR EAST BC Saipan Island	(J):100kW::SEA
	PORTUGAL	
	RADIO PORTUGUESA Lisbon-São Gabriel	100kW::SA
	RADIO RENASCENCA Muge	100kW::SA
	SEYCHELLES	
	FAR EAST BC ASS'N North Pt, Mahé Is	80kW::EAF W-Su:80kW::EAF
(con'd)		



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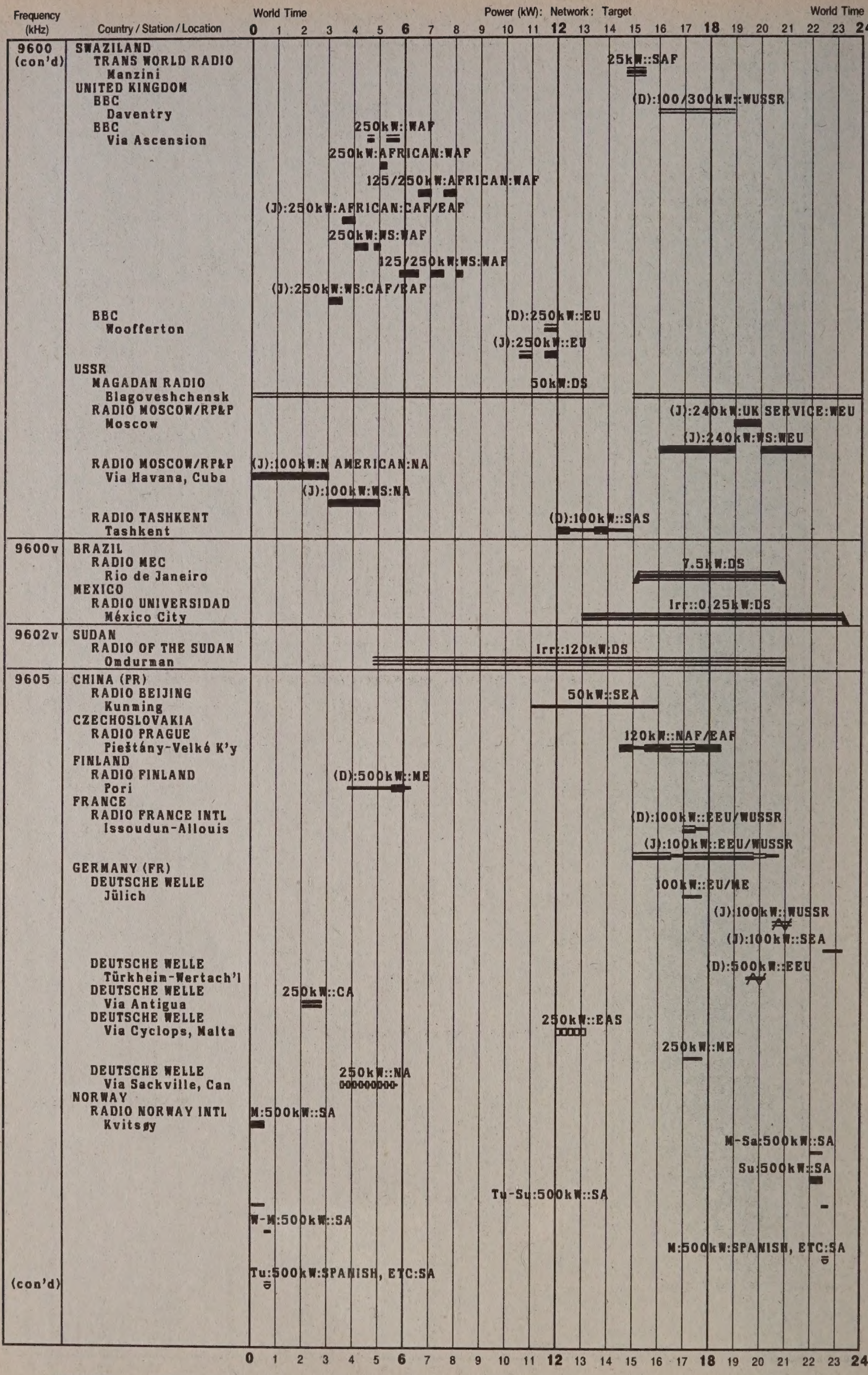
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9600 (con'd)	SWAZILAND TRANS WORLD RADIO Manzini	25kW::SAF
	UNITED KINGDOM BBC Daventry	(D):100/300kW::WUSSR
	BBC Via Ascension	250kW::WAF 250kW:AFRICAN:WAF 125/250kW:AFRICAN:WAF (J):250kW:AFRICAN:CAF/EAF 250kW:WS:WAF 125/250kW:WS:WAF (J):250kW:WS:CAF/EAF
	BBC Woofferton	(D):250kW::EU (J):250kW::EU
	USSR MAGADAN RADIO Blagoveshchensk	50kW:DS
	RADIO MOSCOW/RP&P Moscow	(J):240kW:UK SERVICE:WEU (J):240kW:WS:WEU
	RADIO MOSCOW/RP&P Via Havana, Cuba	(J):100kW:N AMERICAN:NA (J):100kW:WS:NA
	RADIO TASHKENT Tashkent	(D):100kW::SAS
9600v	BRAZIL RADIO MEC Rio de Janeiro	7.5kW:DS
	MEXICO RADIO UNIVERSIDAD México City	Irr::0.25kW:DS
9602v	SUDAN RADIO OF THE SUDAN Omdurman	Irr::120kW:DS
9605	CHINA (PR) RADIO BEIJING Kunming	50kW::SEA
	CZECHOSLOVAKIA RADIO PRAGUE Pieštány-Velké K'y	120kW::NAF/EAF
	FINLAND RADIO FINLAND Pori	(D):500kW::ME
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(D):100kW::EEU/WUSSR (J):100kW::EEU/WUSSR
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::EU/ME (J):100kW::WUSSR (J):100kW::SEA
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::EEU
	DEUTSCHE WELLE Via Antigua	250kW::CA
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::EAS 250kW::ME
	DEUTSCHE WELLE Via Sackville, Can	250kW::NA
	NORWAY RADIO NORWAY INTL Kvitsøy	M:500kW::SA M-Sa:500kW::SA Su:500kW::SA Tu-Su:500kW::SA W-M:500kW::SA M:500kW:SPANISH, ETC:SA Tu:500kW:SPANISH, ETC:SA
(con'd)		

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ARABIC / عرب ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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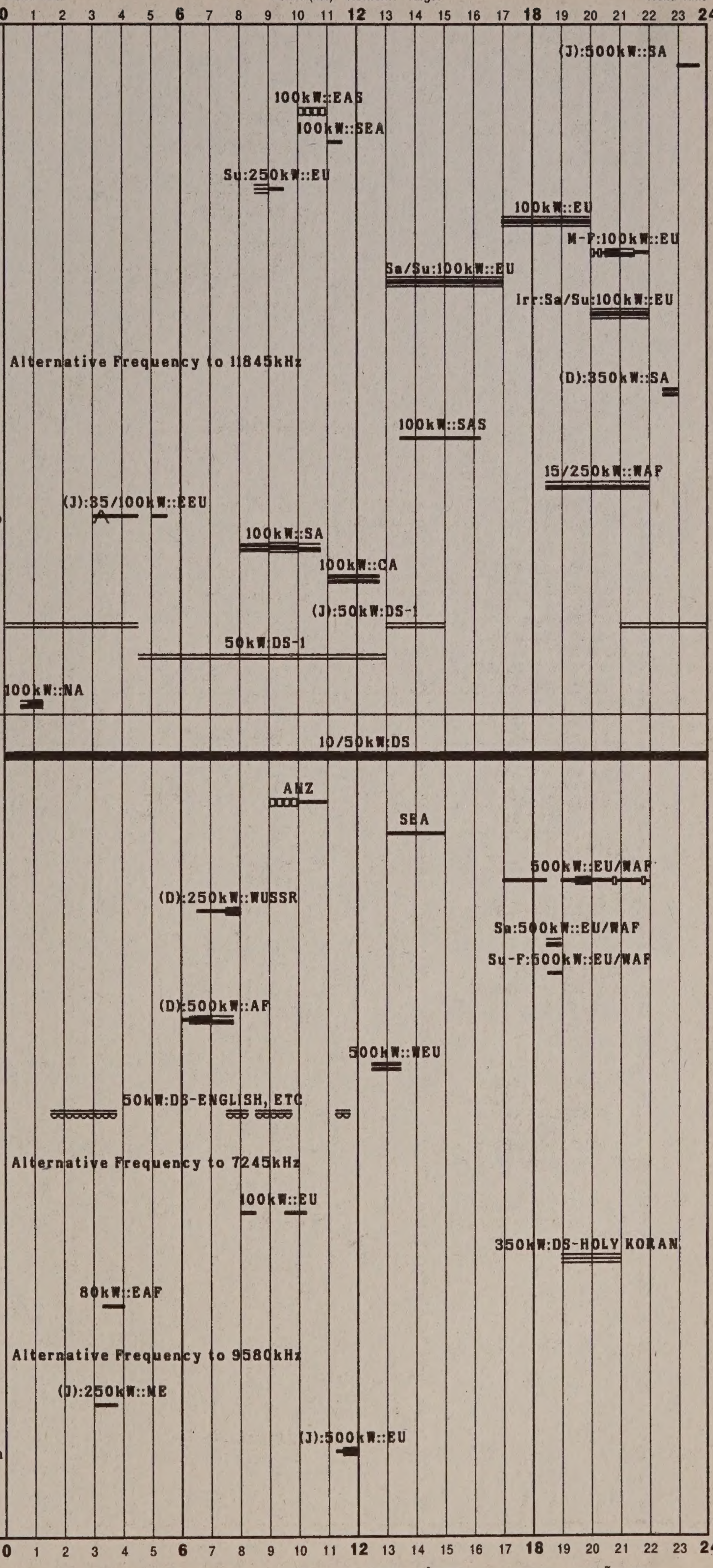

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9605 (con'd)	**NORWAY**	
	RADIO NORWAY INTL Sveio	(J):500kW::SA
	PHILIPPINES	
	RADIO VERITAS ASIA Malolos	100kW::EAS 100kW::SEA
	PORTUGAL	
	ADVENTIST WORLD R Sines	Su:250kW::EU
	RADIO PORTUGUESA Lisbon-São Gabriel	100kW::EU M-F:100kW::EU Sa/Su:100kW::EU Irr:Sa/Su:100kW::EU
	SWEDEN	
	RADIO SWEDEN INTL Hörby	Alternative Frequency to 11845kHz
	RADIO SWEDEN INTL Karlsborg	(D):350kW::SA
	UNITED KINGDOM	
	BBC Via Maşirah, Oman	100kW::SAS
	USA	
	VOICE OF AMERICA Via M'rovia, Liberia	15/250kW::WAF
	VOICE OF AMERICA Via Tangier,Morocco	(J):35/100kW::EEU
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::SA 100kW::CA
	USSR	
	RADIO MOSCOW Serpukhov	(J):50kW:DS-1 50kW:DS-1
	VATICAN STATE	
	VATICAN RADIO Sta Maria di Galeria	100kW::NA
9610	**AUSTRALIA**	
	AUSTRALIAN BC CORP Perth	10/50kW:DS
	CHINA (TAIWAN)	
	VOICE FREE CHINA T'ai-pei	ANZ SEA
	FINLAND	
	RADIO FINLAND Pori	500kW::EU/WAF
	+RADIO FINLAND Pori	(D):250kW::WUSSR
	RADIO FINLAND Pori	Sa:500kW::EU/WAF Su-F:500kW::EU/WAF
	GERMANY (FR)	
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::AF
	HOLLAND	
	RADIO NEDERLAND Flevoland	500kW::WEU
	INDIA	
	ALL INDIA RADIO Delhi	50kW:DS-ENGLISH, ETC
	MAURITANIA	
	ORT DE MAURITANIE Nouakchott	Alternative Frequency to 7245kHz
	MONACO	
	TRANS WORLD RADIO Monte Carlo	100kW::EU
	SAUDI ARABIA	
	BS OF THE KINGDOM Riyadh	350kW:DS-HOLY KORAN
	SEYCHELLES	
	FAR EAST BC ASS'N North Pt, Mahé Is	80kW::EAF
	SOUTH AFRICA	
	RADIO RSA Meyerton	Alternative Frequency to 9580kHz
	TURKEY	
	TURKISH RTV CORP Ankara	(J):250kW::ME
	UNITED KINGDOM	
(con'd)	BBC Holywell-Rampisham	(J):500kW::EU

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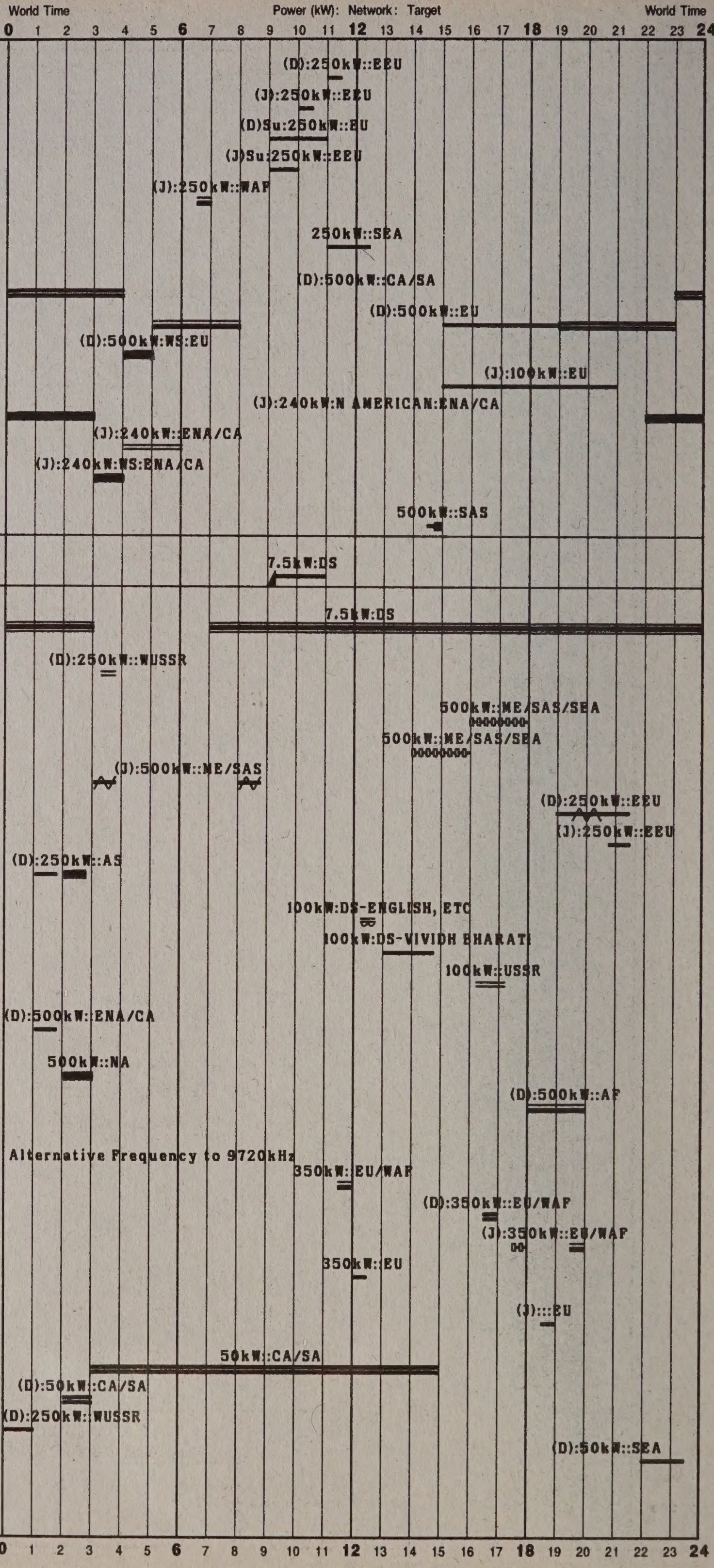
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ☰ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9610 (con'd)	UNITED KINGDOM BBC Skelton, Cumbria	(D):250kW::EEU (J):250kW::EEU (D)Su:250kW::EU (J)Su:250kW::EEU
	BBC Via Ascension	(J):250kW::WAF
	USA VOICE OF AMERICA Via Philippines	250kW::SEA
	USSR RADIO MOSCOW/RP&P Alma-Ata	(D):500kW::CA/SA (D):500kW::EU (D):500kW:WS:EU
	RADIO MOSCOW/RP&P Sverdlovsk	(J):100kW::EU
	RADIO MOSCOW/RP&P Tula	(J):240kW:N AMERICAN:ENA/CA (J):240kW::ENA/CA (J):240kW:WS:ENA/CA
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	500kW::SAS
9612v	INDONESIA R REP INDONESIA Jayapura	7.5kW:DS
9615	BRAZIL RADIO CULTURA São Paulo	7.5kW:DS
	CANADA RADIO CANADA INTL Via Sines, Portugal	(D):250kW::WUSSR
	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	500kW::ME/SAS/SEA
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::ME/SAS/SEA (J):500kW::ME/SAS
	DEUTSCHE WELLE Via Sines, Portugal	(D):250kW::EEU (J):250kW::EEU
	+DEUTSCHE WELLE Via Sri Lanka	(D):250kW::AS
	INDIA ALL INDIA RADIO Bombay	100kW:DS-ENGLISH, ETC 100kW:DS-VIVIDH BHARATI
	ALL INDIA RADIO Delhi	100kW::USSR
	NORWAY RADIO NORWAY INTL Sveio	(D):500kW::ENA/CA
	SOUTH AFRICA RADIO RSA Meyerton	500kW::NA (D):500kW::AF
	SWEDEN IBRA RADIO Via Cyclops, Malta	Alternative Frequency to 9720kHz
	RADIO SWEDEN INTL Hörby	350kW::EU/WAF (D):350kW::EU/WAF (J):350kW::EU/WAF
	RADIO SWEDEN INTL Karlsborg	350kW::EU
	UNITED KINGDOM BBC	(J):::EU
	USA KGEI-VO FRIENDSHIP Redwood City, Ca	50kW::CA/SA (D):50kW::CA/SA
	VOICE OF AMERICA Via Kavála, Greece	(D):250kW::WUSSR
(con'd)	VOICE OF AMERICA Via Philippines	(D):50kW::SEA



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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —

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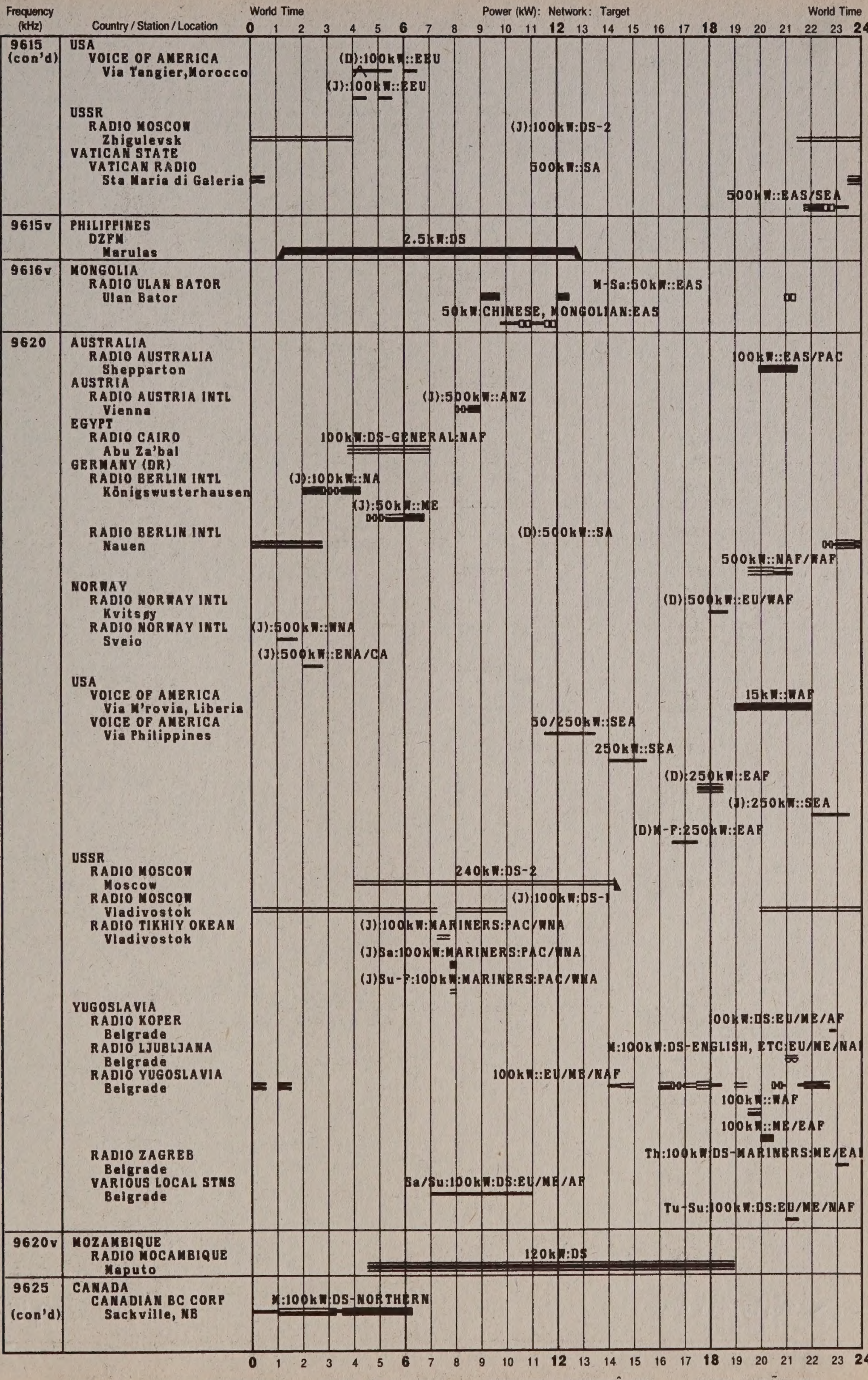

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9615 (con'd)	USA VOICE OF AMERICA Via Tangier,Morocco	(D):100kW::EEU (J):100kW::EEU
	USSR RADIO MOSCOW Zhigulevsk	(J):100kW:DS-2
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	500kW::SA 500kW::EAS/SEA
9615v	PHILIPPINES DZFM Marulas	2.5kW:DS
9616v	MONGOLIA RADIO ULAN BATOR Ulan Bator	M-Sa:50kW::EAS 50kW:CHINESE, MONGOLIAN:EAS
9620	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::EAS/PAC
	AUSTRIA RADIO AUSTRIA INTL Vienna	(J):500kW::ANZ
	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-GENERAL:NAF
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	(J):100kW::NA (J):50kW::ME
	RADIO BERLIN INTL Nauen	(D):500kW::SA 500kW::NAF/WAF
	NORWAY RADIO NORWAY INTL Kvitsøy	(D):500kW::EU/WAF
	RADIO NORWAY INTL Sveio	(J):500kW::WNA (J):500kW::ENA/CA
	USA VOICE OF AMERICA Via M'rovia, Liberia	15kW::WAF
	VOICE OF AMERICA Via Philippines	50/250kW::SEA 250kW::SEA (D):250kW::EAF (J):250kW::SEA (D)M-F:250kW::EAF
	USSR RADIO MOSCOW Moscow	240kW:DS-2
	RADIO MOSCOW Vladivostok	(J):100kW:DS-1
	RADIO TIKHIY OKEAN Vladivostok	(J):100kW:MARINERS:PAC/WNA (J)Sa:100kW:MARINERS:PAC/WNA (J)Su-F:100kW:MARINERS:PAC/WNA
	YUGOSLAVIA RADIO KOPER Belgrade	100kW:DS:EU/ME/AF
	RADIO LJUBLJANA Belgrade	M:100kW:DS-ENGLISH, ETC:EU/ME/NA
	RADIO YUGOSLAVIA Belgrade	100kW::EU/ME/NAF 100kW::WAF 100kW::ME/EAF
	RADIO ZAGREB Belgrade	Th:100kW:DS-MARINERS:ME/EA
	VARIOUS LOCAL STNS Belgrade	Sa/Su:100kW:DS:EU/ME/AF Tu-Su:100kW:DS:EU/ME/NAF
9620v	MOZAMBIQUE RADIO MOCAMBIQUE Maputo	120kW:DS
9625 (con'd)	CANADA CANADIAN BC CORP Sackville, NB	M:100kW:DS-NORTHERN

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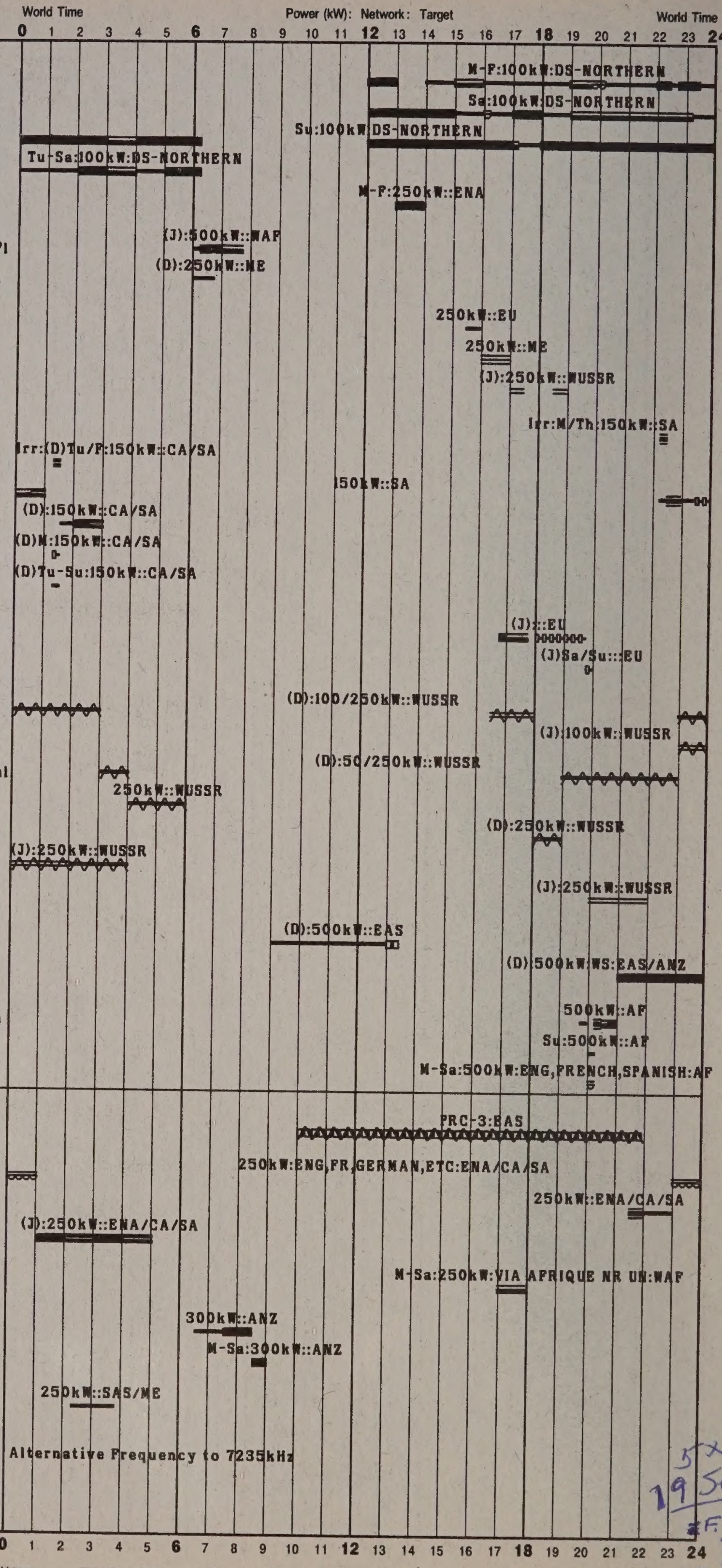
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9625 (con'd)	**CANADA** CANADIAN BC CORP Sackville, NB	M-F:100kW:DS-NORTHERN Sa:100kW:DS-NORTHERN Su:100kW:DS-NORTHERN Tu-Sa:100kW:DS-NORTHERN
	RADIO CANADA INTL Sackville, NB	M-F:250kW::ENA
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::WAF
	DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::ME
	ROMANIA RADIO BUCHAREST Bucharest	250kW::EU 250kW::ME (J):250kW::WUSSR
	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:M/Th:150kW::SA Irr:(D)Tu/F:150kW::CA/SA
	SWISS RADIO INTL Schwarzenburg	150kW::SA (D):150kW::CA/SA (D)M:150kW::CA/SA (D)Tu-Su:150kW::CA/SA
	UNITED KINGDOM BBC	(J)::EU (J)Sa/Su::EU
	USA RFE-RL Via Germany (FR)	(D):100/250kW::WUSSR (J):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	250kW::WUSSR (D):250kW::WUSSR (J):250kW::WUSSR
	VOICE OF AMERICA Via Kavála, Greece	(J):250kW::WUSSR
	USSR RADIO MOSCOW/RP&P Chita	(D):500kW::EAS
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	(D):500kW:WS:EAS/ANZ 500kW::AF Su:500kW::AF M-Sa:500kW:ENG,FRENCH,SPANISH:AF
9630	**CHINA (TAIWAN)** CENTRAL BC SYSTEM T'ai-pei	PRC-3:EAS
	CZECHOSLOVAKIA RADIO PRAGUE Prague	250kW:ENG,FR,GERMAN,ETC:ENA/CA/SA 250kW::ENA/CA/SA (J):250kW::ENA/CA/SA
	GABON ADVENTIST WORLD R Moanda-Moyabe	M-Sa:250kW:VIA AFRIQUE NR UN:WAF
	HOLLAND RADIO NEDERLAND Via Neth Antilles	300kW::ANZ M-Sa:300kW::ANZ
	INDIA ALL INDIA RADIO Aligarh	250kW::SAS/ME
(con'd)	**NORWAY** RADIO NORWAY INTL Kvitsøy	Alternative Frequency to 7235kHz
	→ SEYCHELLES FEBC	

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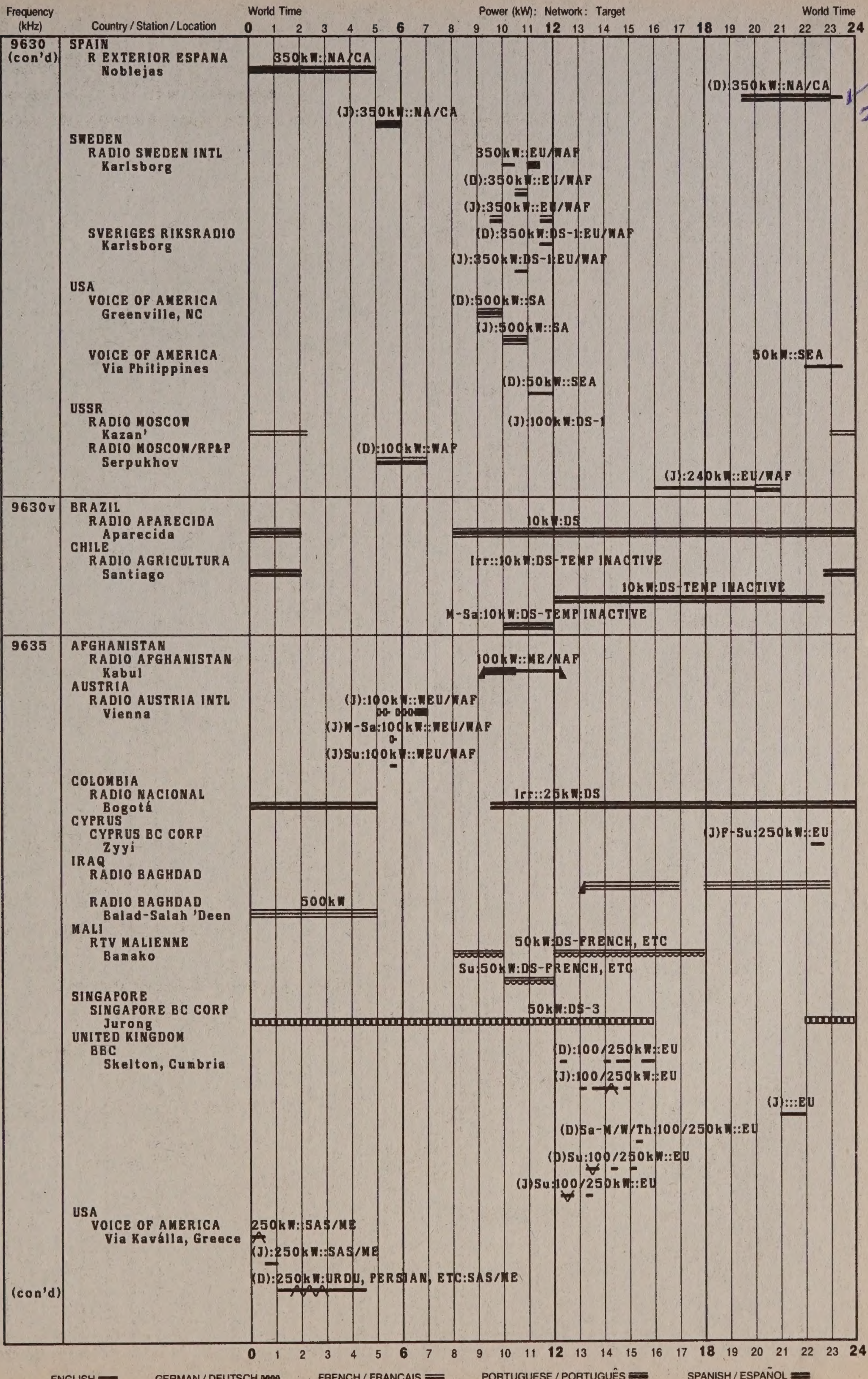
ARABIC / عربي ═ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭▭▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9630 (con'd)	**SPAIN** R EXTERIOR ESPANA Noblejas	350kW::NA/CA (D):350kW::NA/CA (J):350kW::NA/CA
	SWEDEN RADIO SWEDEN INTL Karlsborg	350kW::EU/WAF (D):350kW::EU/WAF (J):350kW::EU/WAF
	SVERIGES RIKSRADIO Karlsborg	(D):350kW:DS-1:EU/WAF (J):350kW:DS-1:EU/WAF
	USA VOICE OF AMERICA Greenville, NC	(D):500kW::SA (J):500kW::SA
	VOICE OF AMERICA Via Philippines	50kW::SEA (D):50kW::SEA
	USSR RADIO MOSCOW Kazan'	(J):100kW:DS-1
	RADIO MOSCOW/RP&P Serpukhov	(D):100kW::WAF (J):240kW::EU/WAF
9630v	**BRAZIL** RADIO APARECIDA Aparecida	10kW:DS
	CHILE RADIO AGRICULTURA Santiago	Irr::10kW:DS-TEMP INACTIVE 10kW:DS-TEMP INACTIVE M-Sa:10kW:DS-TEMP INACTIVE
9635	**AFGHANISTAN** RADIO AFGHANISTAN Kabul	100kW::ME/NAF
	AUSTRIA RADIO AUSTRIA INTL Vienna	(J):100kW::WEU/WAF (J)M-Sa:100kW::WEU/WAF (J)Su:100kW::WEU/WAF
	COLOMBIA RADIO NACIONAL Bogotá	Irr::25kW:DS
	CYPRUS CYPRUS BC CORP Zyyi	(J)F-Su:250kW::EU
	IRAQ RADIO BAGHDAD	
	RADIO BAGHDAD Balad-Salah 'Deen	500kW
	MALI RTV MALIENNE Bamako	50kW:DS-FRENCH, ETC Su:50kW:DS-FRENCH, ETC
	SINGAPORE SINGAPORE BC CORP Jurong	50kW:DS-3
	UNITED KINGDOM BBC Skelton, Cumbria	(D):100/250kW::EU (J):100/250kW::EU (J):::EU (D)Sa-M/W/Th:100/250kW::EU (D)Su:100/250kW::EU (J)Su:100/250kW::EU
(con'd)	**USA** VOICE OF AMERICA Via Kavála, Greece	250kW::SAS/ME (J):250kW::SAS/ME (D):250kW:URDU, PERSIAN, ETC:SAS/ME

in Fr
23-SEP
87

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SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9635 (con'd)	USA	
	VOICE OF AMERICA Via Tangier, Morocco	(J):100kW::EEU/WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(J):250/300kW::WUSSR
	USSR	
	RADIO MOSCOW Vladivostok	50kW::WNA
	RADIO MOSCOW/RP&P Vladivostok	50kW:N AMERICAN:WNA 50kW:WS:WNA
	RADIO TIKHIY OKEAN Vladivostok	50kW:MARINERS:PAC/WNA Sa:50kW:MARINERS:PAC/WNA Su-F:50kW:MARINERS:PAC/WNA
9640	ALGERIA	
	'VO FREE SAHARA' Via RTV Algerienne	50kW:POLISARIO FRONT:WAF/SA
	RTV ALGERIENNE Bouchaoui	50kW::WAF/SA 50kW:DS-3:WAF/SA
	BANGLADESH	
	RADIO BANGLADESH Dhaka	100kW::SAS
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	100kW::SAS/SEA
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::ME (J):500kW::NAF/ME
	DEUTSCHE WELLE Via Antigua	250kW::NA
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::AM
	DEUTSCHE WELLE Via Sri Lanka	250kW::EAS
	KOREA (REPUBLIC)	
	RADIO KOREA In-Kimjae	100kW::EAS
	ROMANIA	
	RADIO BUCHAREST Bucharest	(D):250kW::ME (J):250kW::AF
	SAUDI ARABIA	
	BS OF THE KINGDOM Riyadh	Alternative Frequency to 9730kHz
	SEYCHELLES	
	FAR EAST BC ASS'N North Pt, Mahé Is	25kW::SAS
	SWAZILAND	
	TRANS WORLD RADIO Manzini	100kW::EAF
	TURKEY	
	TURKISH RTV CORP Ankara	(J):250kW::ME
	UNITED KINGDOM	
	BBC Daventry	250kW:WS:CA/ANZ
	USA	
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU
	VOICE OF AMERICA Greenville, NC	M-F:250kW:FEED:CA (D)M-F:250kW:FEED:CA (J)M-F:250kW:FEED:CA
	USSR	
	'RADIO MAGALLANES' Via Radio Moscow	(D):500kW::SA
	RADIO KIEV L'vov	(J):500kW::ENA/CA
	RADIO MOSCOW/RP&P Armavir	(D):500kW::SA (D)Su-Tu:500kW::SA (D)W-Sa:500kW::SA
	RADIO MOSCOW/RP&P L'vov	(J):500kW:MARINERS:ENA/CA (J):500kW:WS:WEU/ENA/CA
	RADIO MOSCOW/RP&P Moscow	(J):240kW::EU
	RADIO VILNIUS L'vov	(J):500kW::ENA/CA

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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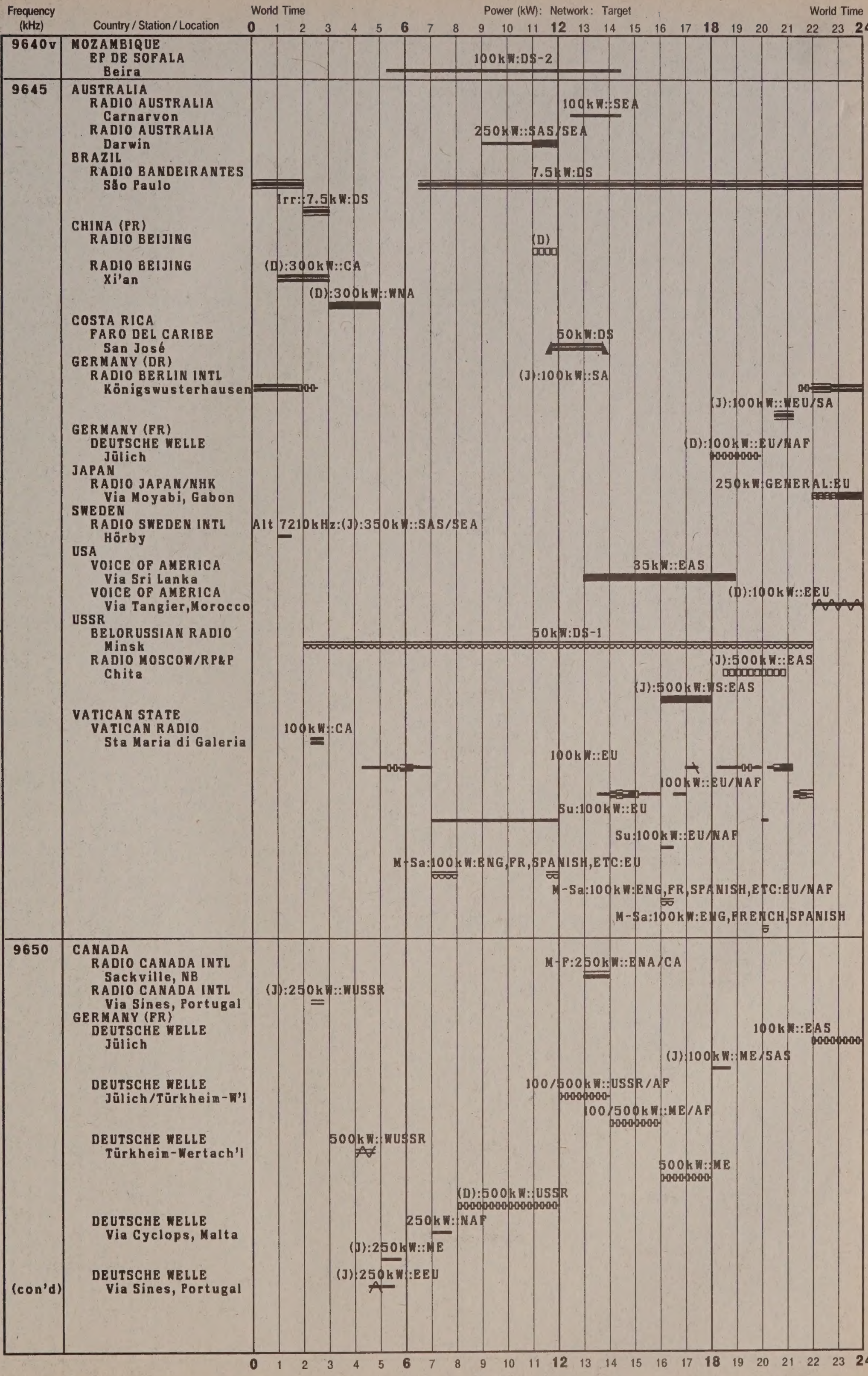

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9650 (con'd)	GERMANY (FR) DEUTSCHE WELLE Via Sri Lanka	(D):250kW::AS (J):250kW::SEA/ANZ
	GUINEA RTV GUINEENNE Conakry	Irr::100kW:DS-ENGLISH, FRENCH Irr::100kW:DS-FRENCH, ETC Irr:M-Sa:100kW:DS-FRENCH, ETC Irr:Su:100kW:DS-FRENCH, ETC
	HOLLAND RADIO NEDERLAND Via Neth Antilles	300kW::CA/ANZ
	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	100kW::EAS
	NORWAY RADIO NORWAY INTL Kvitsøy	(J):500kW::ME
	RADIO NORWAY INTL Sveio	(J)M:500kW::WNA (J)Tu-Su:500kW::WNA (J)W-M:500kW::WNA (J)Tu:500kW:SPANISH, ETC:WNA
	PHILIPPINES RADIO VERITAS ASIA Malolos	100kW::EAS
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::ANZ
	USA RFE-RL Via Germany (FR)	(D):250kW::WUSSR
	VOICE OF AMERICA Delano, California	250kW::CA/SA
	VOICE OF AMERICA Via Tangier,Morocco	(D):100kW::EEU
	VOICE OF AMERICA Via Woofferton, UK	(J):250/300kW::EEU
	USSR 'RADIO MAGALLANES' Via Radio Moscow	(D):500kW::SA
	RADIO MOSCOW/RP&P Frunze	(D):500kW::SA (D):500kW::WAF
	RADIO MOSCOW/RP&P Moscow	(J):250kW:WS:SAS/SEA
	RADIO MOSCOW/RP&P Zhigulevsk	(J):100kW::EEU
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::SAS
9650v	ALBANIA RADIO TIRANA Lushnjë	100kW::SA
9655	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC/EU
	AUSTRIA RADIO AUSTRIA INTL Vienna	(D):500kW::SA (D)M-F:500kW::SA (D)Sa/Su:500kW::SA
	BRAZIL RADIO NACIONAL Brasília	250kW::SA
	CUBA RADIO HABANA Havana	100kW::SA
	EGYPT RADIO CAIRO Kafr Silîm-Abis	Alt 9670kHz:250kW::WEU
	FINLAND RADIO FINLAND Pori	250kW::WUSSR
	+RADIO FINLAND Pori	(D):500kW::ENA/CA
	+RADIO FINLAND Pori	(D):500kW::WAF/SA
(con'd)	NORWAY RADIO NORWAY INTL Kvitsøy	500kW::EU

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
9655 (con'd)	NORWAY RADIO NORWAY INTL Kvitsøy	M-Sa:500kW::EU/AF Su:500kW::EU/AF Tu-Su:500kW::EU/AF M:500kW:SPANISH, ETC:EU/AF
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:DS-GENERAL:NAF
	SWEDEN RADIO SWEDEN INTL Hörby	Alt 9755kHz:(D):350kW::EU (J):350kW::EU/WAF (J):350kW::EU
	RADIO SWEDEN INTL Karlsborg	(J):350kW::WUSSR
	THAILAND RADIO THAILAND Pathum Thani	100kW::SEA/EU 100kW::AS 100kW::EAS/SEA Sa/Su:100kW::SEA/EU
	USSR RADIO MOSCOW Orcha	(J):100kW:MARINERS:ENA/CA
	RADIO MOSCOW/RP&P Kazan'	(D):100kW::ME/SAS
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	(D):100kW::EAS (J):240kW:WS:WNA
9655v	PERU RADIO NORPERUANA Chachapoyas	1kW:DS
9660	AUSTRALIA AUSTRALIAN BC CORP Brisbane	10kW:DS
	AUSTRIA RADIO AUSTRIA INTL Vienna	(D):100kW::CA/SA (D)Su/M:100kW::CA/SA (D)Tu-Sa:100kW::CA/SA
	GERMANY (DR) RADIO BERLIN INTL Nauen	500kW::WEU
	SWEDEN RADIO SWEDEN INTL Hörby	(D):350kW::ME/SAS/SEA
	TURKEY TURKISH RTV CORP Ankara	(D):250kW::EU
	UNITED KINGDOM BBC Skelton, Cumbria	(D):250kW::EU
	BBC Via Cincinnati, USA	Alternative Frequency to 9515kHz
	BBC Woofferton	(D):250kW::EU
	USA RFE-RL Via Germany (FR)	(J):100/250kW::WUSSR 100kW::WUSSR (D):100/250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(J):250kW::WUSSR
	VOICE OF AMERICA Via Ismaning, GFR	(D):100kW::EEU/WUSSR (J):100kW::WUSSR
	VOICE OF AMERICA Via Kavála, Greece	(J):250kW::WUSSR
	VOICE OF AMERICA Via Philippines	100kW::EAS
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::NA (D):100kW::CA
(con'd)		

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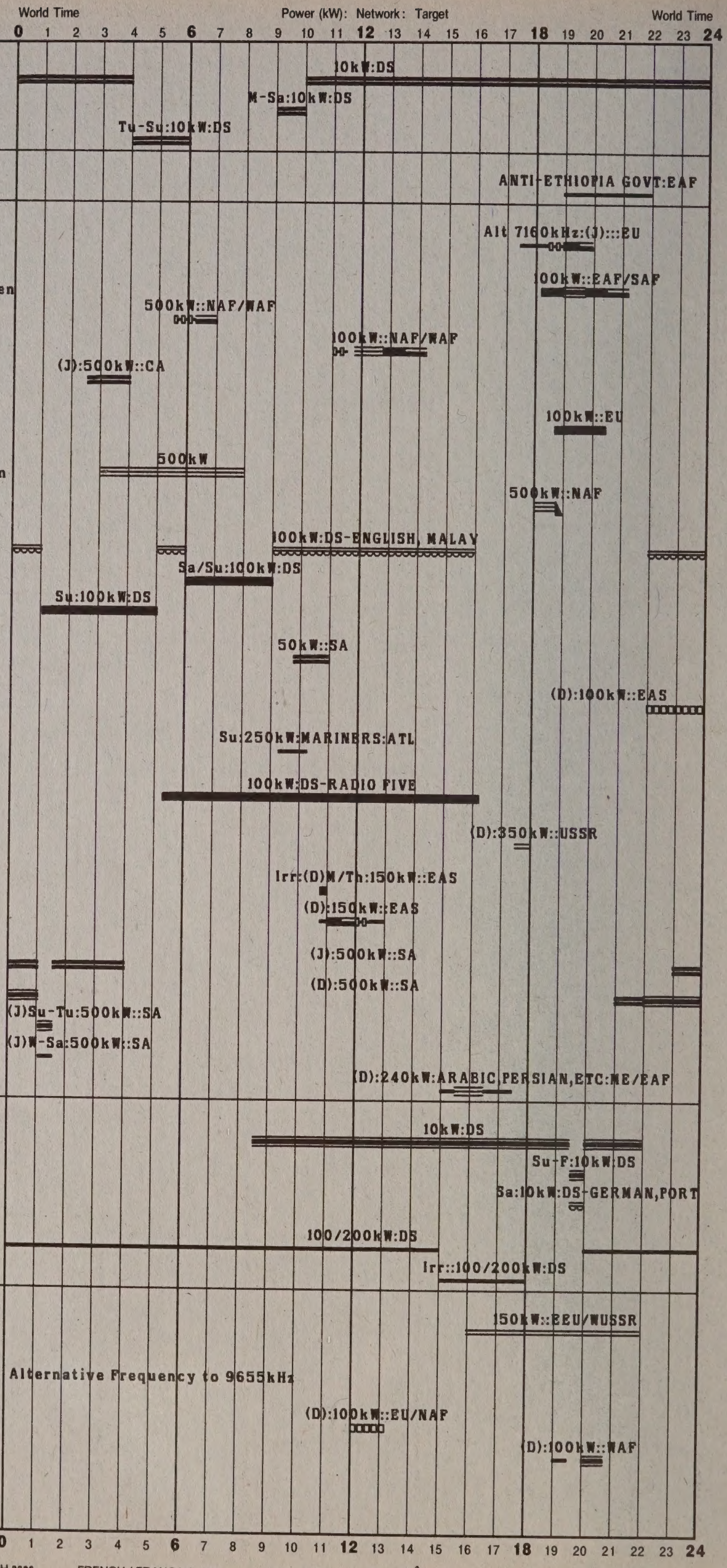
Frequency (kHz)	Country / Station / Location
9660 (con'd)	VENEZUELA RADIO RUMBOS Caracas
9660v	CLANDESTINE (AFRICA) "VO ETHIOPIA UNITY Sudan
9665	AFGHANISTAN RADIO AFGHANISTAN Via USSR
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen
	RADIO BERLIN INTL Nauen
	INDIA ALL INDIA RADIO Delhi
	IRAQ RADIO BAGHDAD Balad-Salah el Deen
	MALAYSIA RADIO MALAYSIA Kajang
	NETHERLANDS ANTILLES TRANS WORLD RADIO Bonaire
	PHILIPPINES FAR EAST BC CO Iba
	ROMANIA RADIO BUCHAREST Bucharest
	SOUTH AFRICA SOUTH AFRICAN BC Meyerton
	SWEDEN RADIO SWEDEN INTL Hörby
	SWITZERLAND RED CROSS BC SVC Schwarzenburg
	SWISS RADIO INTL Schwarzenburg
	USSR RADIO MOSCOW/RP&P Dushanbé
	RADIO MOSCOW/RP&P Voronezh, RSFSR
9665v	BRAZIL RADIO MARUMBI Florianópolis
	KOREA (DPR) KOREAN CENTRAL BS Pyŏngyang
9670	CHINA (PR) RADIO BEIJING Xi'an
	EGYPT RADIO CAIRO Kafr Silîm-Abis
(con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich



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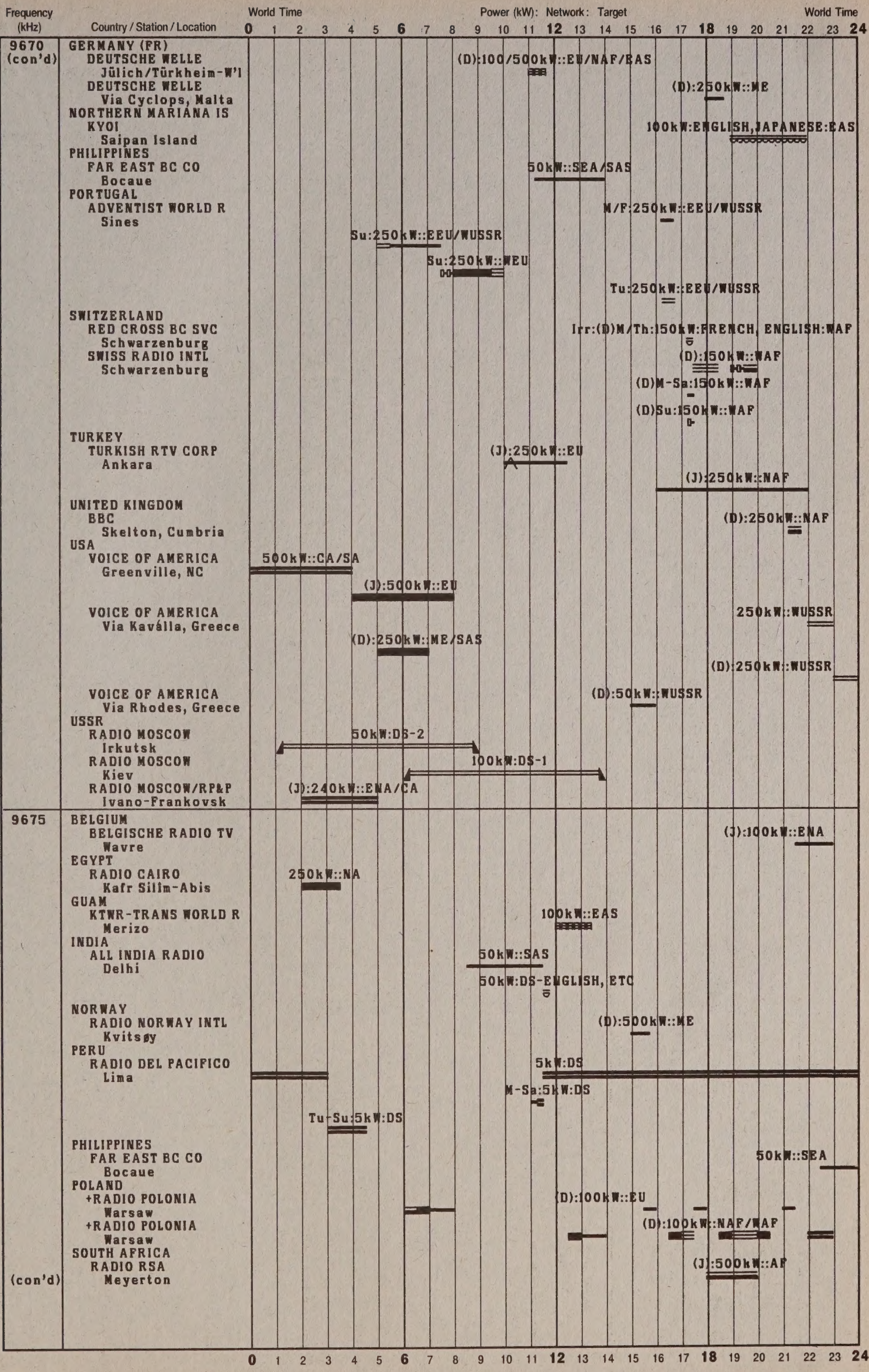

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9670 (con'd)	GERMANY (FR)	
	DEUTSCHE WELLE Jülich/Türkheim-W'l	(D):100/500kW::EU/NAF/EAS
	DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::ME
	NORTHERN MARIANA IS	
	KYOI Saipan Island	100kW:ENGLISH,JAPANESE:EAS
	PHILIPPINES	
	FAR EAST BC CO Bocaue	50kW::SEA/SAS
	PORTUGAL	
	ADVENTIST WORLD R Sines	M/F:250kW::EEU/WUSSR
		Su:250kW::EEU/WUSSR
		Su:250kW::WEU
		Tu:250kW::EEU/WUSSR
	SWITZERLAND	
	RED CROSS BC SVC Schwarzenburg	Irr:(D)M/Th:150kW:FRENCH, ENGLISH:WAF
	SWISS RADIO INTL Schwarzenburg	(D):150kW::WAF
		(D)M-Sa:150kW::WAF
		(D)Su:150kW::WAF
	TURKEY	
	TURKISH RTV CORP Ankara	(J):250kW::EU
		(J):250kW::NAF
	UNITED KINGDOM	
	BBC Skelton, Cumbria	(D):250kW::NAF
	USA	
	VOICE OF AMERICA Greenville, NC	500kW::CA/SA
		(J):500kW::EU
	VOICE OF AMERICA Via Kaválla, Greece	250kW::WUSSR
		(D):250kW::ME/SAS
		(D):250kW::WUSSR
	VOICE OF AMERICA Via Rhodes, Greece	(D):50kW::WUSSR
	USSR	
	RADIO MOSCOW Irkutsk	50kW:DS-2
	RADIO MOSCOW Kiev	100kW:DS-1
	RADIO MOSCOW/RP&P Ivano-Frankovsk	(J):240kW::ENA/CA
9675	BELGIUM	
	BELGISCHE RADIO TV Wavre	(J):100kW::ENA
	EGYPT	
	RADIO CAIRO Kafr Silîm-Abis	250kW::NA
	GUAM	
	KTWR-TRANS WORLD R Merizo	100kW::EAS
	INDIA	
	ALL INDIA RADIO Delhi	50kW::SAS
		50kW:DS-ENGLISH, ETC
	NORWAY	
	RADIO NORWAY INTL Kvitsøy	(D):500kW::ME
	PERU	
	RADIO DEL PACIFICO Lima	5kW:DS
		M-Sa:5kW:DS
		Tu-Su:5kW:DS
	PHILIPPINES	
	FAR EAST BC CO Bocaue	50kW::SEA
	POLAND	
	+RADIO POLONIA Warsaw	(D):100kW::EU
	+RADIO POLONIA Warsaw	(D):100kW::NAF/WAF
	SOUTH AFRICA	
(con'd)	RADIO RSA Meyerton	(J):500kW::AF

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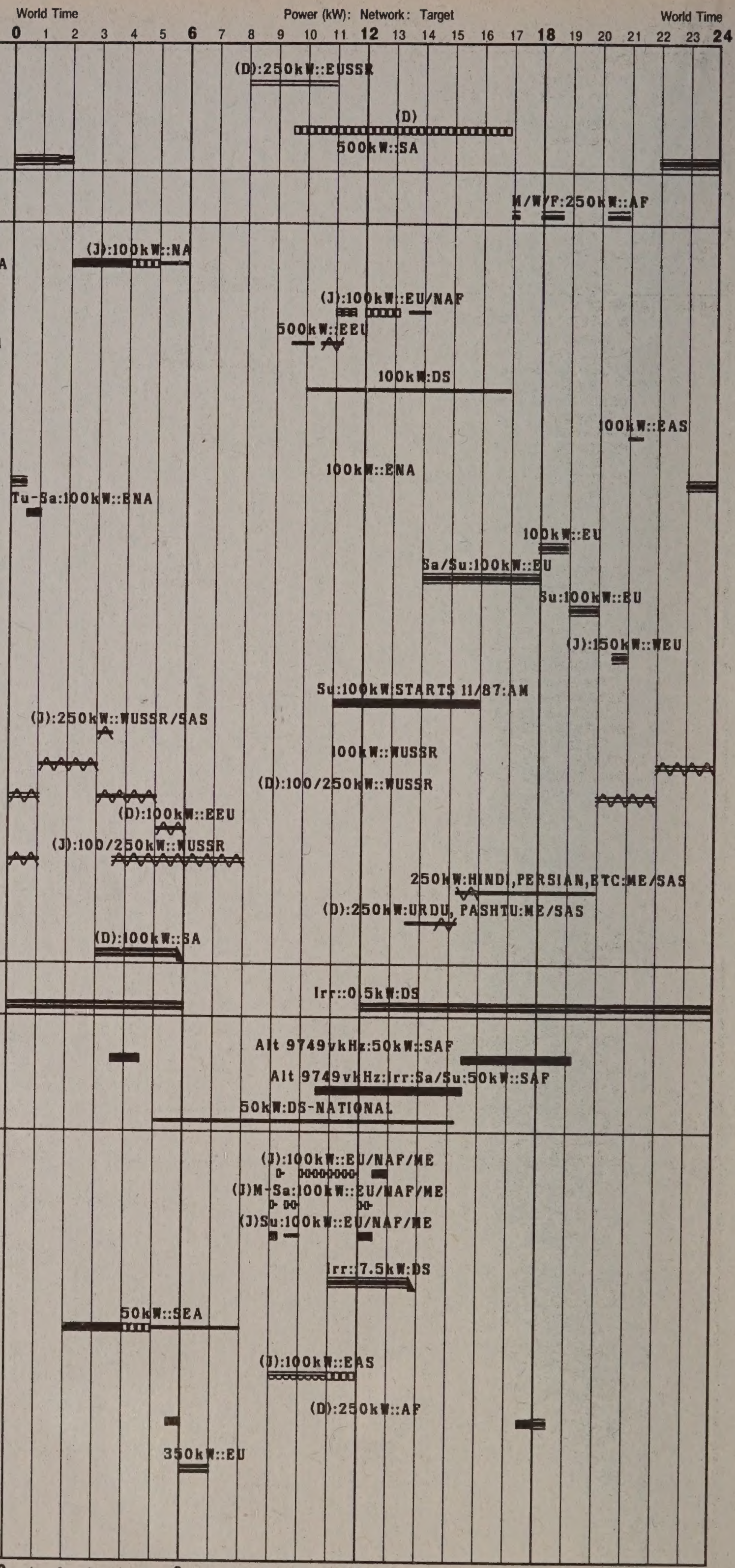
9675 (con'd)	USA VOICE OF AMERICA Via Philippines	(D):250kW::EUSSR
	USSR RADIO MOSCOW/RP&P	(D)
	RADIO MOSCOW/RP&P Tashkent	500kW::SA
9677	MONGOLIA RADIO ULAN BATOR Ulan Bator	M/W/F:250kW::AF
9680	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(J):100kW::NA
	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::EU/NAF
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EEU
	INDONESIA R REP INDONESIA Jakarta, Jawa	100kW:DS
	PHILIPPINES RADIO VERITAS ASIA Malolos	100kW::EAS
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	100kW::ENA Tu-Sa:100kW::ENA
	RADIO RENASCENCA Muge	100kW::EU Sa/Su:100kW::EU Su:100kW::EU
	SWITZERLAND SWISS RADIO INTL Schwarzenburg	(J):150kW::WEU
	USA KUSW Salt Lake City,Utah	Su:100kW:STARTS 11/87:AM
	R FREE AFGHANISTAN Via Germany (FR)	(J):250kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	100kW::WUSSR (D):100/250kW::WUSSR (D):100kW::EEU (J):100/250kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	250kW:HINDI,PERSIAN,ETC:ME/SAS (D):250kW:URDU, PASHTU:ME/SAS
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::SA
9680.3	MEXICO RADIO XEQQ México City	Irr::0.5kW:DS
9684v	TANZANIA RADIO TANZANIA Dar es Salaam	Alt 9749vkHz:50kW::SAF Alt 9749vkHz:Irr:Sa/Su:50kW::SAF 50kW:DS-NATIONAL
9685	AUSTRIA RADIO AUSTRIA INTL Vienna	(J):100kW::EU/NAF/ME (J)M-Sa:100kW::EU/NAF/ME (J)Su:100kW::EU/NAF/ME
	BRAZIL RADIO GAZETA São Paulo	Irr::7.5kW:DS
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	50kW::SEA
	NORTHERN MARIANA IS KFBS-FAR EAST BC Saipan Island	(J):100kW::EAS
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::AF
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::EU



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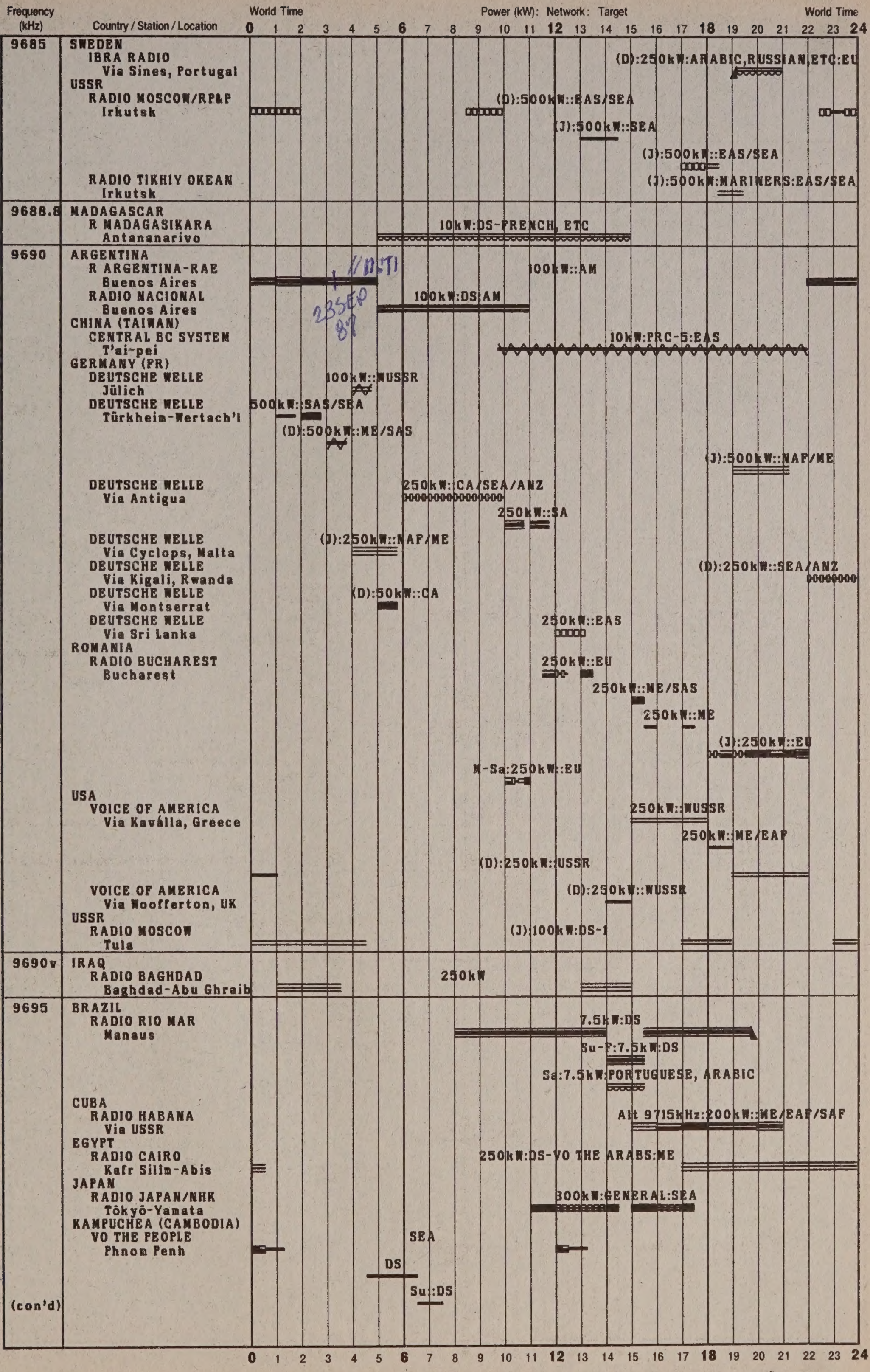

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9685	**SWEDEN** IBRA RADIO Via Sines, Portugal	(D):250kW:ARABIC,RUSSIAN,ETC:EU
	USSR RADIO MOSCOW/RP&P Irkutsk	(D):500kW::EAS/SEA (J):500kW::SEA (J):500kW::EAS/SEA
	RADIO TIKHIY OKEAN Irkutsk	(J):500kW:MARINERS:EAS/SEA
9688.8	**MADAGASCAR** R MADAGASIKARA Antananarivo	10kW:DS-FRENCH, ETC
9690	**ARGENTINA** R ARGENTINA-RAE Buenos Aires	100kW::AM + 1/10 STI 23 SEP 87
	RADIO NACIONAL Buenos Aires	100kW:DS:AM
	CHINA (TAIWAN) CENTRAL BC SYSTEM T'ai-pei	10kW:PRC-5:EAS
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::WUSSR
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::SAS/SEA (D):500kW::ME/SAS (J):500kW::NAF/ME
	DEUTSCHE WELLE Via Antigua	250kW::CA/SEA/ANZ 250kW::SA
	DEUTSCHE WELLE Via Cyclops, Malta	(J):250kW::NAF/ME
	DEUTSCHE WELLE Via Kigali, Rwanda	(D):250kW::SEA/ANZ
	DEUTSCHE WELLE Via Montserrat	(D):50kW::CA
	DEUTSCHE WELLE Via Sri Lanka	250kW::EAS
	ROMANIA RADIO BUCHAREST Bucharest	250kW::EU 250kW::ME/SAS 250kW::ME (J):250kW::EU M-Sa:250kW::EU
	USA VOICE OF AMERICA Via Kavála, Greece	250kW::WUSSR 250kW::ME/EAF (D):250kW::USSR
	VOICE OF AMERICA Via Woofferton, UK	(D):250kW::WUSSR
	USSR RADIO MOSCOW Tula	(J):100kW:DS-1
9690v	**IRAQ** RADIO BAGHDAD Baghdad-Abu Ghraib	250kW
9695	**BRAZIL** RADIO RIO MAR Manaus	7.5kW:DS Su-F:7.5kW:DS Sa:7.5kW:PORTUGUESE, ARABIC
	CUBA RADIO HABANA Via USSR	Alt 9715kHz:200kW::ME/EAF/SAF
	EGYPT RADIO CAIRO Kafr Silim-Abis	250kW:DS-VO THE ARABS:ME
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	300kW:GENERAL:SEA
	KAMPUCHEA (CAMBODIA) VO THE PEOPLE Phnom Penh	SEA DS Su::DS
(con'd)		

ENGLISH ▬ GERMAN / DEUTSCH ▭▭▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ▤

ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▤ MULTILINGUAL ▭▭▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

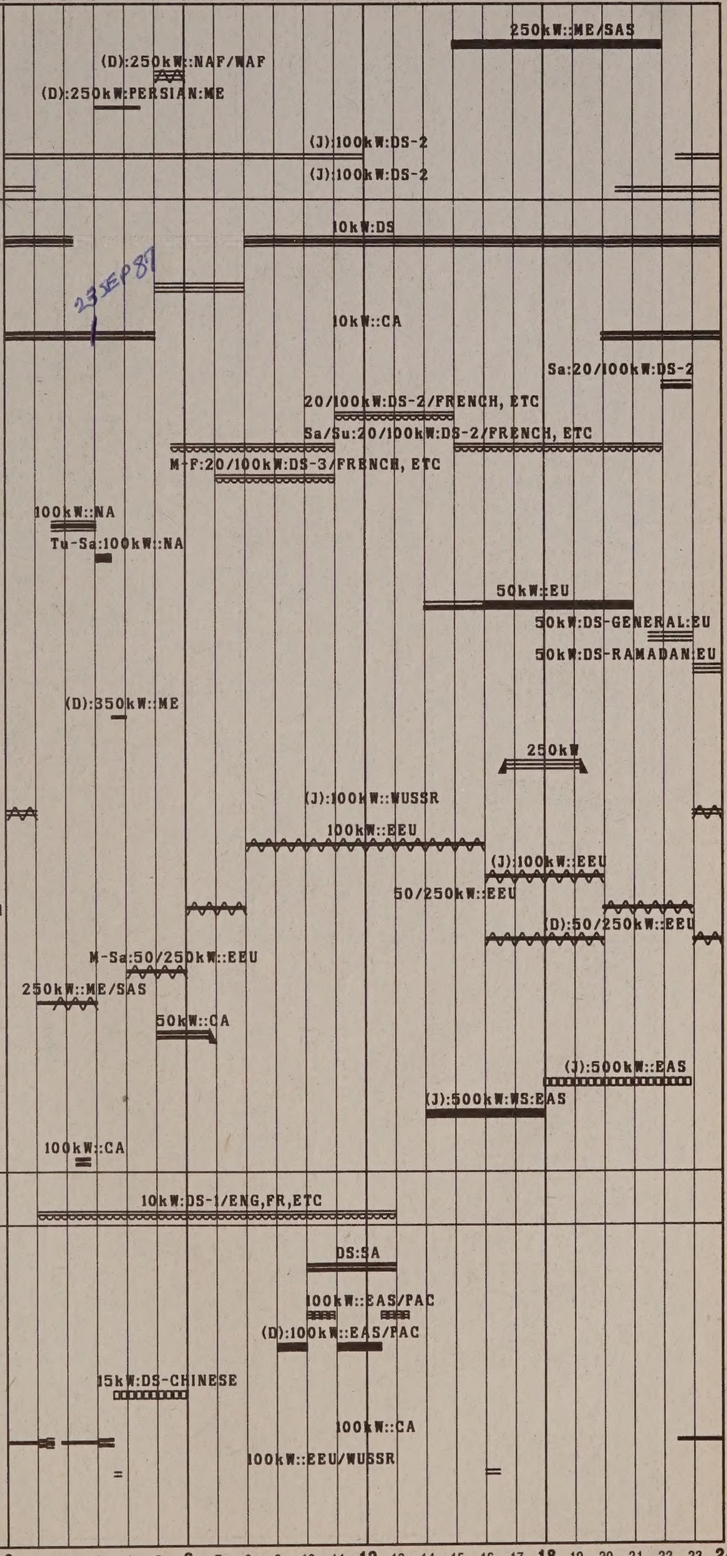
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9695 (con'd)	PHILIPPINES RADIO VERITAS ASIA Malolos	100kW::SEA
	SOUTH AFRICA RADIO RSA Meyerton	(J):500kW::NA
	SWEDEN RADIO SWEDEN INTL Hörby	350kW::ENA/CA 350kW::SA 350kW::CA/SA 350kW::NA 350kW::SAS/SEA 350kW::WUSSR (D):350kW::NA (J):350kW::SA (J):350kW::ENA/CA
	UNITED ARAB EMIRATES VOICE OF THE UAE Abu Dhabi	120kW:DS:ME
	USA RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::EEU M-F:50/250kW::EEU
	VOICE OF AMERICA Via Rhodes, Greece	50kW::ME
9700	BULGARIA RADIO SOFIA Elin Pelin-Stolnik	150kW::EU/NAF/ME Su:150kW::EU/NAF/ME
	RADIO SOFIA Rebrovo-Sofia	(D):250kW::EU (J):250kW::CA/ENA (J):250kW::EU
	CHINA (PR) RADIO BEIJING Xi'an	150kW::ANZ
	CUBA RADIO HABANA Via USSR	Alternative Frequency to 7165kHz
	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-VO THE ARABS:NAF/WEU
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::SA 100kW::WAF (J):100kW::AF (J):100kW::WAF
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::CA/SA
	DEUTSCHE WELLE Via Montserrat	(J):50kW::AM
	PHILIPPINES RADIO VERITAS ASIA Malolos	50kW::SAS/SEA 100kW::SAS/SEA
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	100kW::CA
	SWEDEN RADIO SWEDEN INTL Hörby	(D):350kW::USSR (D):350kW::AF
	USA AFRTS-US MILITARY Delano, California	100kW:DS-ABC/CBS/NBC/NPR:SEA (D):100kW:DS-ABC/CBS/NBC/NPR (J):100kW:DS-ABC/CBS/NBC/NPR:SEA
(con'd)	VOICE OF AMERICA Greenville, NC	250/500kW::WAF

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
ARABIC / عربي ═ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Power (kW): Network: Target



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9700	USA VOICE OF AMERICA Via Kaválla, Greece	250kW::ME/SAS (D):250kW::NAF/WAF (D):250kW:PERSIAN:ME
	USSR RADIO MOSCOW Komsomol'sk 'Amure	(J):100kW:DS-2
	RADIO MOSCOW Serpukhov	(J):100kW:DS-2
9705	BRAZIL RADIO NACIONAL Rio de Janeiro	10kW:DS
	IRAQ RADIO BAGHDAD	23SEP87
	MEXICO RADIO MEXICO INTL México City	10kW::CA
	NIGER LA VOIX DU SAHEL Niamey	Sa:20/100kW:DS-2 20/100kW:DS-2/FRENCH, ETC Sa/Su:20/100kW:DS-2/FRENCH, ETC M-F:20/100kW:DS-3/FRENCH, ETC
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	100kW::NA Tu-Sa:100kW::NA
	SAUDI ARABIA BS OF THE KINGDOM Jiddah	50kW::EU 50kW:DS-GENERAL:EU 50kW:DS-RAMADAN:EU
	SWEDEN RADIO SWEDEN INTL Hörby	(D):350kW::ME
	UNITED ARAB EMIRATES VOICE OF THE UAE Abu Dhabi	250kW
	USA RFE-RL Via Germany (FR)	(J):100kW::WUSSR 100kW::EEU (J):100kW::EEU
	RFE-RL Via Lisbon, Portugal	50/250kW::EEU (D):50/250kW::EEU M-Sa:50/250kW::EEU
	VOICE OF AMERICA Via Kaválla, Greece	250kW::ME/SAS
	WYFR-FAMILY RADIO Okeechobee,Florida	50kW::CA
	USSR RADIO MOSCOW/RP&P Vladivostok	(J):500kW::EAS (J):500kW:WS:EAS
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::CA
9709v	MAURITIUS MAURITIUS BC CORP Curepipe	10kW:DS-1/ENG,FR,ETC
9710	ARGENTINA RADIO NACIONAL Buenos Aires	DS:SA
	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::EAS/PAC (D):100kW::EAS/PAC
	CHINA (PR) GANSU PEOPLES BS Lanzhou	15kW:DS-CHINESE
	ITALY RTV ITALIANA Rome	100kW::CA 100kW::EEU/WUSSR
(con'd)		

ENGLISH ▬ GERMAN / DEUTSCH ▬ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬

ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —

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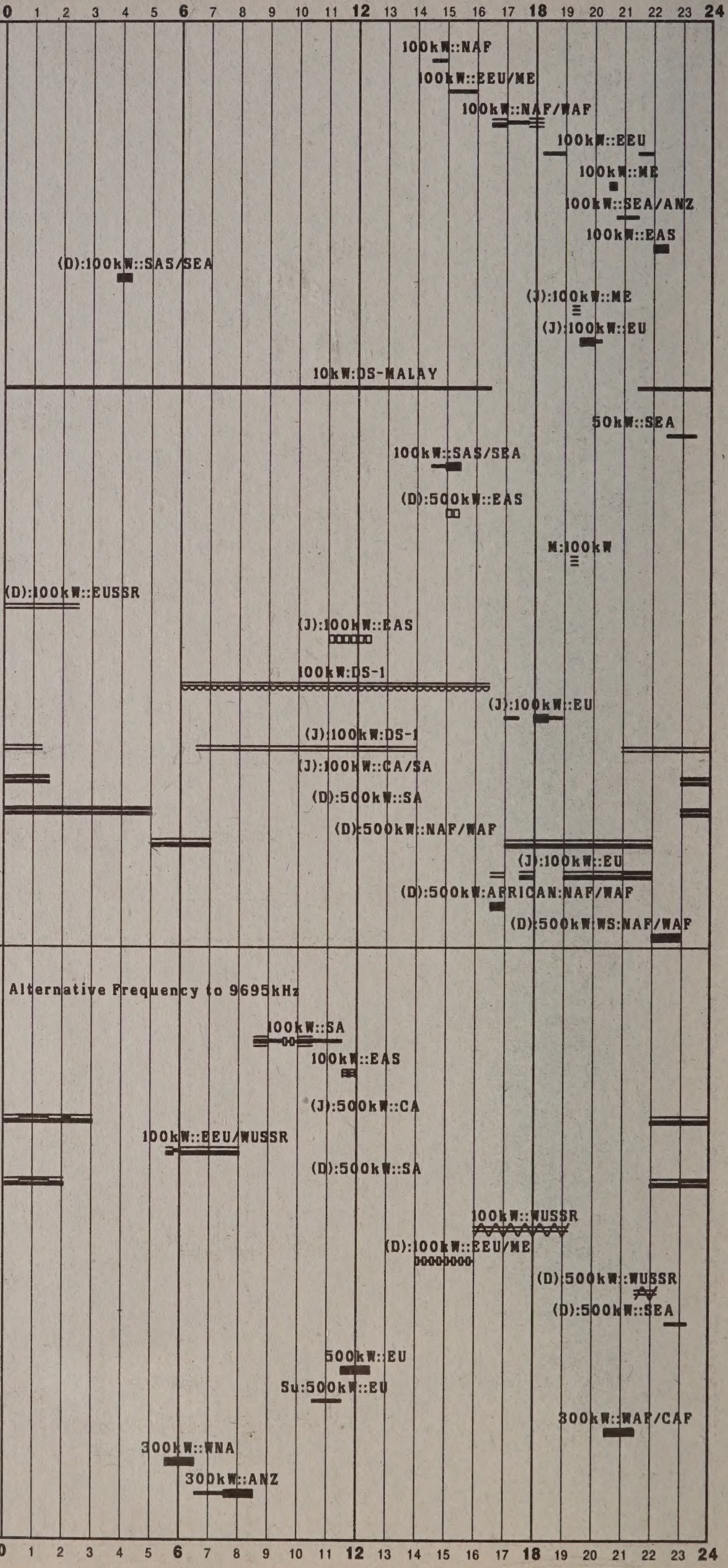

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9710 (con'd)	**ITALY** RTV ITALIANA Rome	100kW::NAF 100kW::EEU/ME 100kW::NAF/WAF 100kW::EEU 100kW::ME 100kW::SEA/ANZ 100kW::EAS (D):100kW::SAS/SEA (J):100kW::ME (J):100kW::EU
	MALAYSIA RADIO MALAYSIA Kajang	10kW:DS-MALAY
	PHILIPPINES FAR EAST BC CO Bocaue	50kW::SEA
	RADIO VERITAS ASIA Malolos	100kW::SAS/SEA
	TURKEY TURKISH RTV CORP Ankara	(D):500kW::EAS
	UNITED NATIONS UNITED NATIONS R Via Rone, Italy	M:100kW
	USA KNLS-NEW LIFE STN Anchor Pt, Alaska	(D):100kW::EUSSR (J):100kW::EAS
	USSR LITHUANIAN RADIO Kaunas	100kW:DS-1
	RADIO KIEV Kiev	(J):100kW::EU
	RADIO MOSCOW Kenga	(J):100kW:DS-1
	RADIO MOSCOW/RP&P Baku	(J):100kW::CA/SA
	RADIO MOSCOW/RP&P Kiev	(D):500kW::SA (D):500kW::NAF/WAF (J):100kW::EU (D):500kW:AFRICAN:NAF/WAF (D):500kW:WS:NAF/WAF
9715	**CUBA** RADIO HABANA Via USSR	Alternative Frequency to 9695kHz
	ECUADOR HCJB-VO THE ANDES Quito	100kW::SA 100kW::EAS
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(J):500kW::CA 100kW::EEU/WUSSR (D):500kW::SA
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::WUSSR (D):100kW::EEU/ME
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::WUSSR (D):500kW::SEA
	HOLLAND RADIO NEDERLAND Flevoland	500kW::EU Su:500kW::EU
	RADIO NEDERLAND Via Madagascar	300kW::WAF/CAF
	RADIO NEDERLAND Via Neth Antilles	300kW::WNA 300kW::ANZ

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ☰ SPANISH / ESPAÑOL ☰
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▭▭ MULTILINGUAL ▭▭ OTHER —
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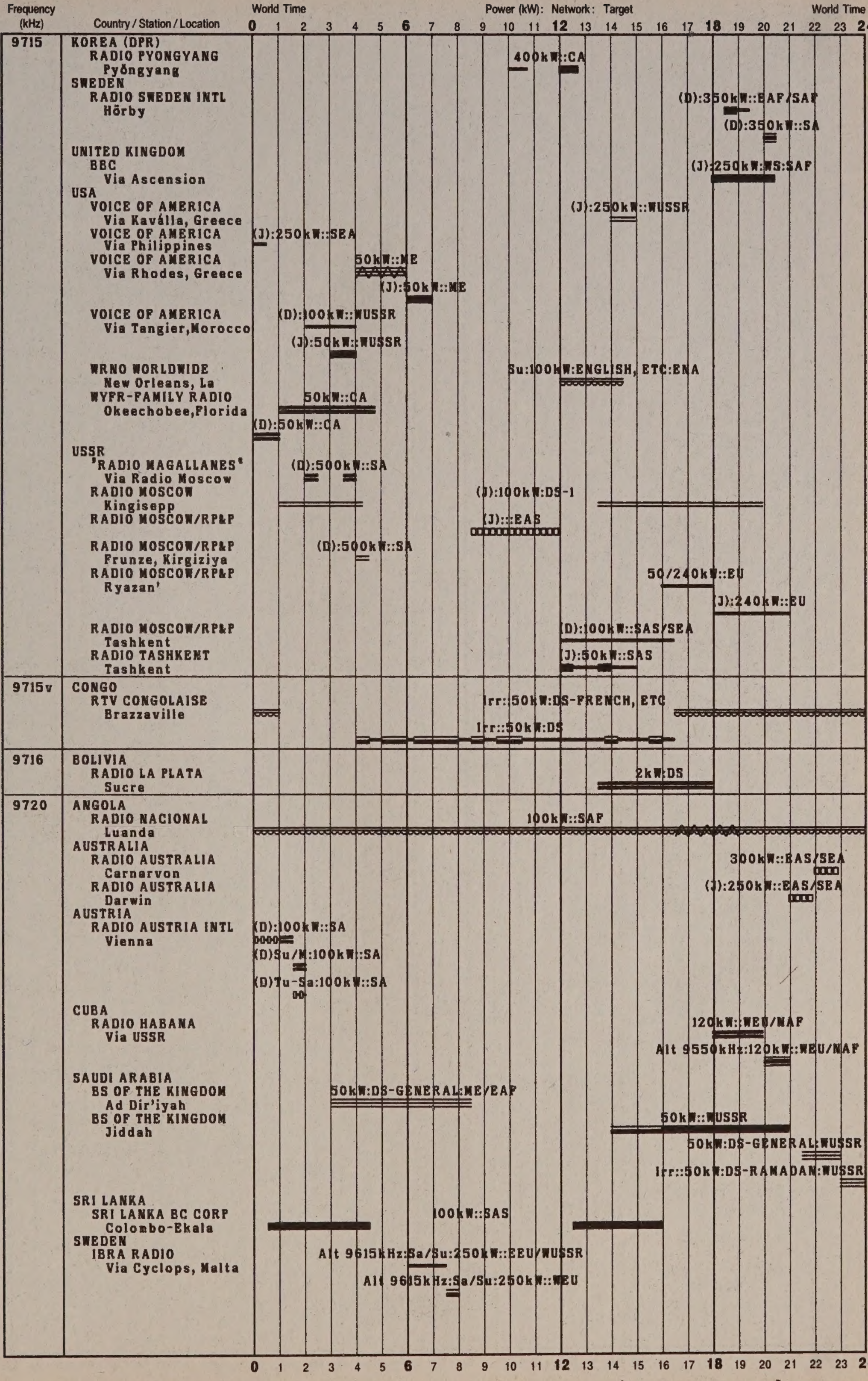

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9715	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	400kW::CA
	SWEDEN RADIO SWEDEN INTL Hörby	(D):350kW::EAF/SAF (D):350kW::SA
	UNITED KINGDOM BBC Via Ascension	(J):250kW:WS:SAF
	USA VOICE OF AMERICA Via Kaválla, Greece	(J):250kW::WUSSR
	VOICE OF AMERICA Via Philippines	(J):250kW::SEA
	VOICE OF AMERICA Via Rhodes, Greece	50kW::ME (J):50kW::ME
	VOICE OF AMERICA Via Tangier,Morocco	(D):100kW::WUSSR (J):50kW::WUSSR
	WRNO WORLDWIDE New Orleans, La	Su:100kW:ENGLISH, ETC:ENA
	WYFR-FAMILY RADIO Okeechobee,Florida	50kW::CA (D):50kW::CA
	USSR "RADIO MAGALLANES" Via Radio Moscow	(D):500kW::SA
	RADIO MOSCOW Kingisepp	(J):100kW:DS-1
	RADIO MOSCOW/RP&P	(J):::EAS
	RADIO MOSCOW/RP&P Frunze, Kirgiziya	(D):500kW::SA
	RADIO MOSCOW/RP&P Ryazan'	50/240kW::EU (J):240kW::EU
	RADIO MOSCOW/RP&P Tashkent	(D):100kW::SAS/SEA
	RADIO TASHKENT Tashkent	(J):50kW::SAS
9715v	CONGO RTV CONGOLAISE Brazzaville	Irr::50kW:DS-FRENCH, ETC Irr::50kW:DS
9716	BOLIVIA RADIO LA PLATA Sucre	2kW:DS
9720	ANGOLA RADIO NACIONAL Luanda	100kW::SAF
	AUSTRALIA RADIO AUSTRALIA Carnarvon	300kW::EAS/SEA
	RADIO AUSTRALIA Darwin	(J):250kW::EAS/SEA
	AUSTRIA RADIO AUSTRIA INTL Vienna	(D):100kW::SA (D)Su/M:100kW::SA (D)Tu-Sa:100kW::SA
	CUBA RADIO HABANA Via USSR	120kW::WEU/NAF Alt 9550kHz:120kW::WEU/NAF
	SAUDI ARABIA BS OF THE KINGDOM Ad Dir'iyah	50kW:DS-GENERAL:ME/EAF
	BS OF THE KINGDOM Jiddah	50kW::WUSSR 50kW:DS-GENERAL:WUSSR Irr::50kW:DS-RAMADAN:WUSSR
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	100kW::SAS
	SWEDEN IBRA RADIO Via Cyclops, Malta	Alt 9615kHz:Sa/Su:250kW::EEU/WUSSR Alt 9615kHz:Sa/Su:250kW::WEU

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ARABIC / عربي ☰ RUSSIAN / PYCCKИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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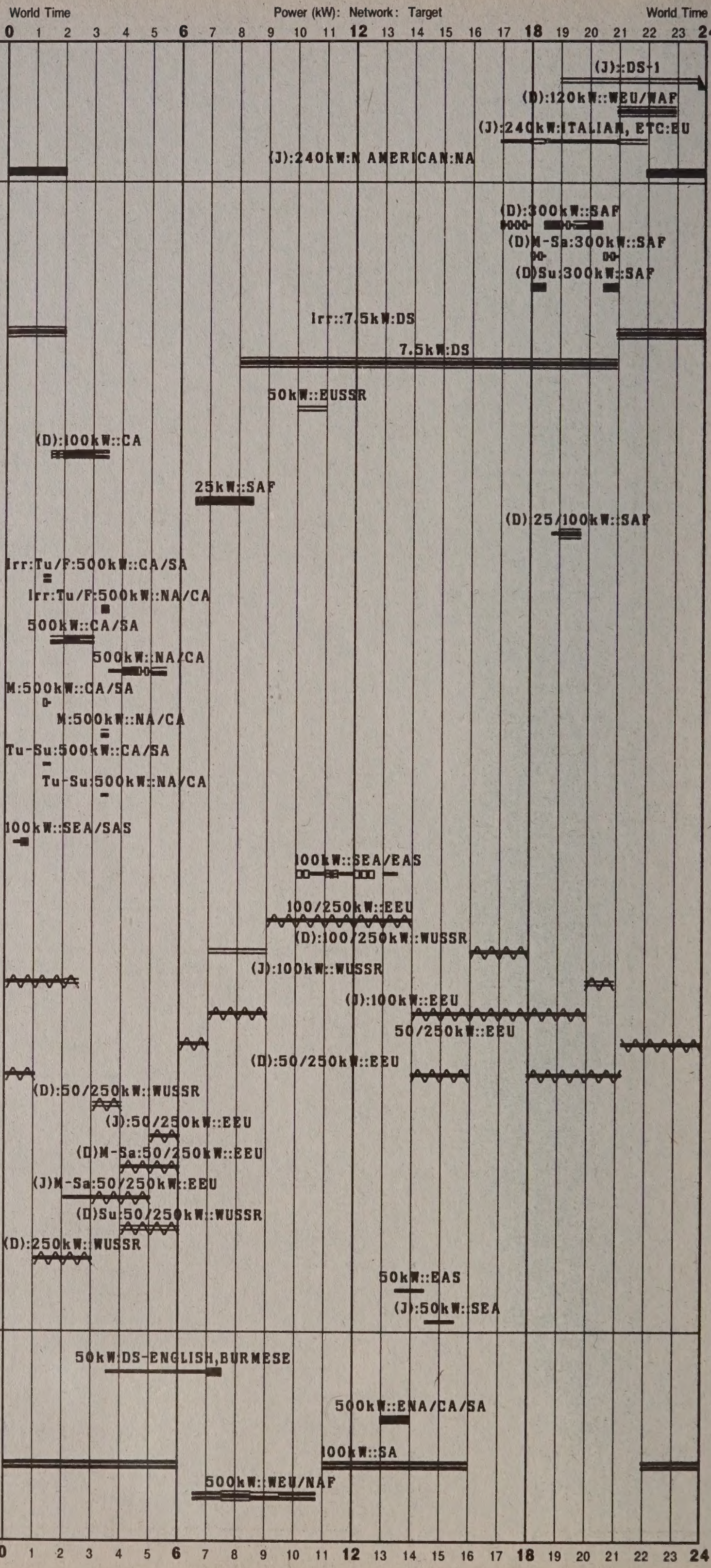

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9720	**USSR** RADIO MOSCOW	(J)::DS-1
	RADIO MOSCOW/RP&P Moscow	(D):120kW::WEU/WAF
	RADIO MOSCOW/RP&P Ryazan'	(J):240kW:ITALIAN, ETC:EU
	RADIO MOSCOW/RP&P Vinnitsa	(J):240kW:N AMERICAN:NA
9725	**AUSTRIA** RADIO AUSTRIA INTL Vienna	(D):300kW::SAF (D)M-Sa:300kW::SAF (D)Su:300kW::SAF
	BRAZIL R CLUBE PARANAENSE Curitiba	Irr::7.5kW:DS 7.5kW:DS
	CHINA (PR) RADIO BEIJING Hohhot	50kW::EUSSR
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	(D):100kW::CA
	SWAZILAND TRANS WORLD RADIO Manzini	25kW::SAF (D):25/100kW::SAF
	SWITZERLAND RED CROSS BC SVC Sottens	Irr:Tu/F:500kW::CA/SA Irr:Tu/F:500kW::NA/CA
	SWISS RADIO INTL Sottens	500kW::CA/SA 500kW::NA/CA M:500kW::CA/SA M:500kW::NA/CA Tu-Su:500kW::CA/SA Tu-Su:500kW::NA/CA
	UNITED KINGDOM BBC Via Singapore	100kW::SEA/SAS 100kW::SEA/EAS
	USA RFE-RL Via Germany (FR)	100/250kW::EEU (D):100/250kW::WUSSR (J):100kW::WUSSR (J):100kW::EEU
	RFE-RL Via Lisbon, Portugal	50/250kW::EEU (D):50/250kW::EEU (D):50/250kW::WUSSR (J):50/250kW::EEU (D)M-Sa:50/250kW::EEU (J)M-Sa:50/250kW::EEU (D)Su:50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	VOICE OF AMERICA Via Philippines	50kW::EAS (J):50kW::SEA
9730	**BURMA** BURMA BC SERVICE Rangoon	50kW:DS-ENGLISH,BURMESE
	CHINA (PR) RADIO BEIJING Shijiazhuang	500kW::ENA/CA/SA
	CUBA RADIO HABANA Havana	100kW::SA 500kW::WEU/NAF
(con'd)		

ENGLISH ▬ GERMAN / DEUTSCH ▬ FRENCH / FRANÇAIS ▬ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ▬ RUSSIAN / РУССКИЙ ▬ CHINESE / 中文 ▬ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER ▬
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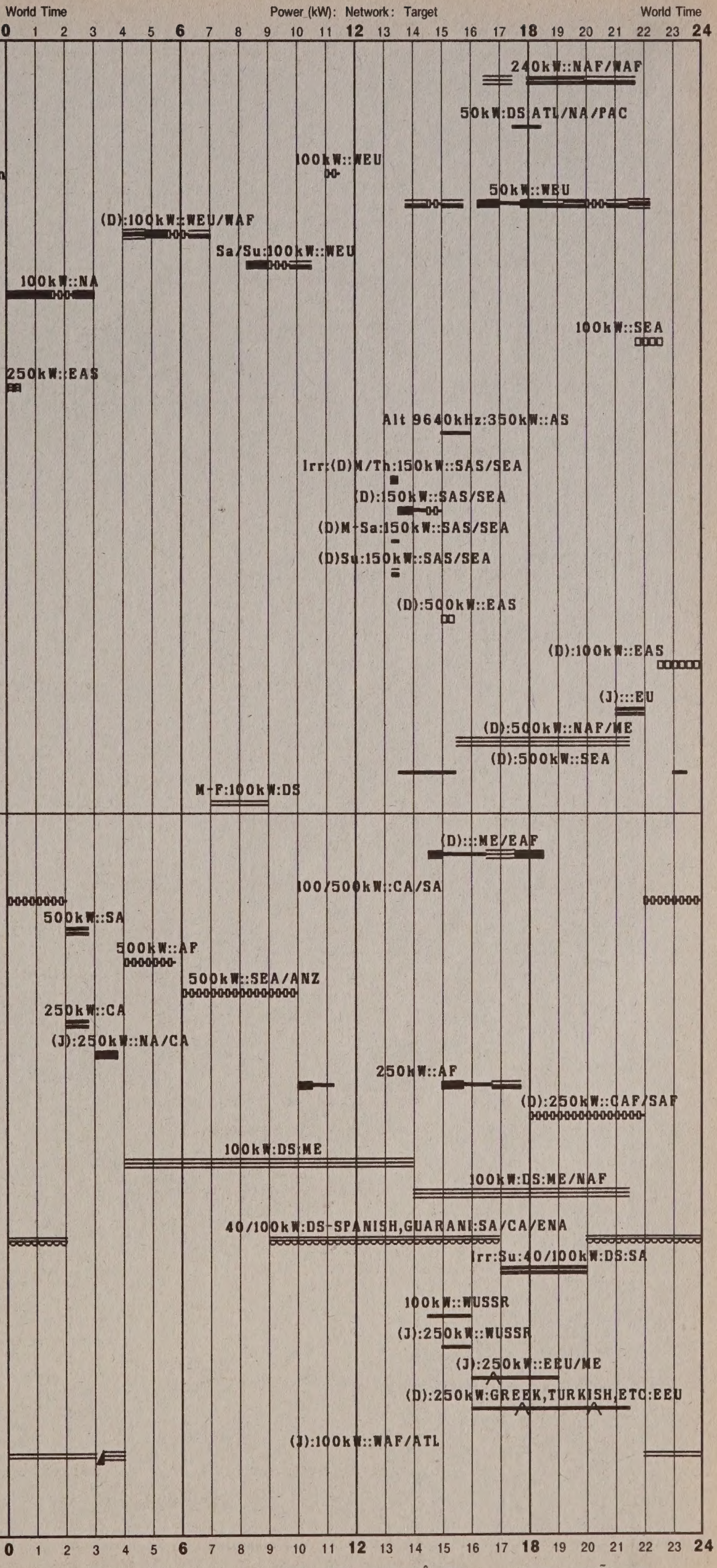

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9730 (con'd)	**CUBA** RADIO HABANA Via USSR	240kW::NAF/WAF
	DENMARK DANMARKS RADIO Copenhagen	50kW:DS:ATL/NA/PAC
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	100kW::WEU 50kW::WEU (D):100kW::WEU/WAF Sa/Su:100kW::WEU
	RADIO BERLIN INTL Nauen	100kW::NA
	INDIA ALL INDIA RADIO Delhi	100kW::SEA
	PHILIPPINES RADIO VERITAS ASIA Palauig	250kW::EAS
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	Alt 9640kHz:350kW::AS
	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:(D)M/Th:150kW::SAS/SEA
	SWISS RADIO INTL Schwarzenburg	(D):150kW::SAS/SEA (D)M-Sa:150kW::SAS/SEA (D)Su:150kW::SAS/SEA
	TURKEY TURKISH RTV CORP Ankara	(D):500kW::EAS
	USA KNLS-NEW LIFE STN Anchor Pt, Alaska	(D):100kW::EAS
	USSR RADIO MOSCOW/RP&P	(J):::EU
	RADIO MOSCOW/RP&P Dushanbé	(D):500kW::NAF/ME
	+RADIO MOSCOW/RP&P Irkutsk	(D):500kW::SEA
	TASS NEWS AGENCY Ul'yanovsk	M-F:100kW:DS
9735	**CZECHOSLOVAKIA** RADIO PRAGUE	(D):::ME/EAF
	GERMANY (FR) DEUTSCHE WELLE Jülich/Türkheim-W'l	100/500kW::CA/SA
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::SA 500kW::AF 500kW::SEA/ANZ
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::CA (J):250kW::NA/CA
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::AF (D):250kW::CAF/SAF
	OMAN RADIO OMAN Sib	100kW:DS:ME
	RADIO OMAN Thamarit	100kW:DS:ME/NAF
	PARAGUAY RADIO NACIONAL Asunción	40/100kW:DS-SPANISH,GUARANI:SA/CA/ENA Irr:Su:40/100kW:DS:SA
	USA VOICE OF AMERICA Via Ismaning, GFR	100kW::WUSSR (J):250kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(J):250kW::EEU/ME (D):250kW:GREEK,TURKISH,ETC:EEU
(con'd)	**USSR** RADIO MOSCOW/RP&P Armavir	(J):100kW::WAF/ATL

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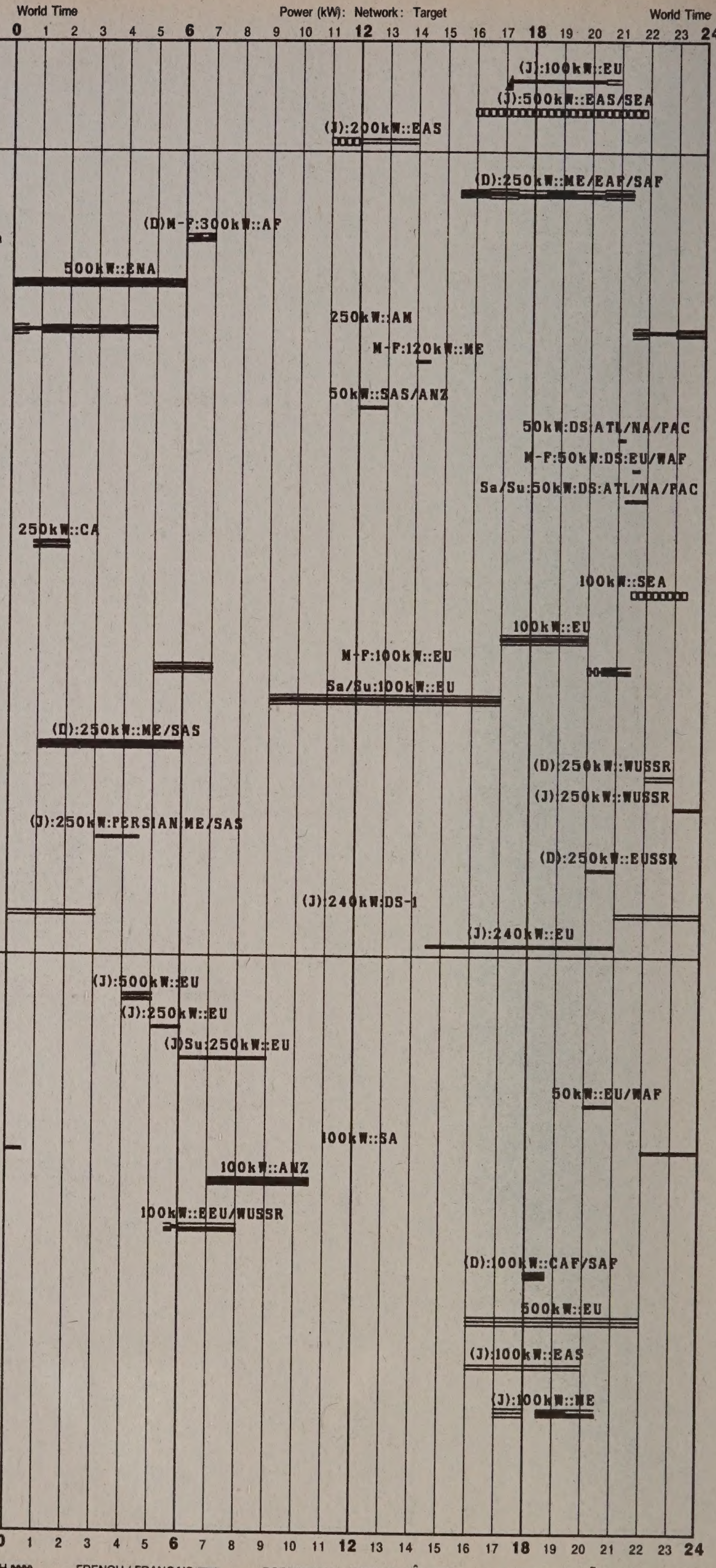
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9735 (con'd)	USSR	
	RADIO MOSCOW/RP&P Armavir	(J):100kW::EU
	RADIO MOSCOW/RP&P Irkutsk	(J):500kW::EAS/SEA
	RADIO MOSCOW/RP&P Novosibirsk	(J):200kW::EAS
9740	BULGARIA	
	RADIO SOFIA Rebrovo-Sofia	(D):250kW::ME/EAF/SAF
	CANADA	
	RADIO CANADA INTL Via United Kingdom	(D)M-F:300kW::AF
	CUBA	
	RADIO HABANA Havana	500kW::ENA
	CZECHOSLOVAKIA	
	RADIO PRAGUE Pieštány-Velké K'y	250kW::AM
	RADIO PRAGUE Prague	M-F:120kW::ME
	DENMARK	
	DANMARKS RADIO Copenhagen	50kW::SAS/ANZ 50kW:DS:ATL/NA/PAC M-F:50kW:DS:EU/WAF Sa/Su:50kW:DS:ATL/NA/PAC
	EGYPT	
	RADIO CAIRO Kafr Silim-Abis	250kW::CA
	PHILIPPINES	
	RADIO VERITAS ASIA Malolos	100kW::SEA
	PORTUGAL	
	RADIO PORTUGUESA Lisbon-São Gabriel	100kW::EU M-F:100kW::EU Sa/Su:100kW::EU
	USA	
	VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::ME/SAS (D):250kW::WUSSR (J):250kW::WUSSR (J):250kW:PERSIAN:ME/SAS
	VOICE OF AMERICA Via Philippines	(D):250kW::EUSSR
	USSR	
	RADIO MOSCOW Moscow	(J):240kW:DS-1
	RADIO MOSCOW/RP&P Moscow	(J):240kW::EU
9745	BULGARIA	
	RADIO SOFIA Plovdiv	(J):500kW::EU
	RADIO SOFIA Rebrovo-Sofia	(J):250kW::EU (J)Su:250kW::EU
	DENMARK	
	DANMARKS RADIO Copenhagen	50kW::EU/WAF
	ECUADOR	
	HCJB-VO THE ANDES Quito	100kW::SA 100kW::ANZ
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	100kW::EEU/WUSSR
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	(D):100kW::CAF/SAF
	IRAQ	
	RADIO BAGHDAD Balad-Salah el Deen	500kW::EU
	NORTHERN MARIANA IS	
	KPBS-FAR EAST BC Saipan Island	(J):100kW::EAS
	SPAIN	
	R EXTERIOR ESPANA Arganda	(J):100kW::ME



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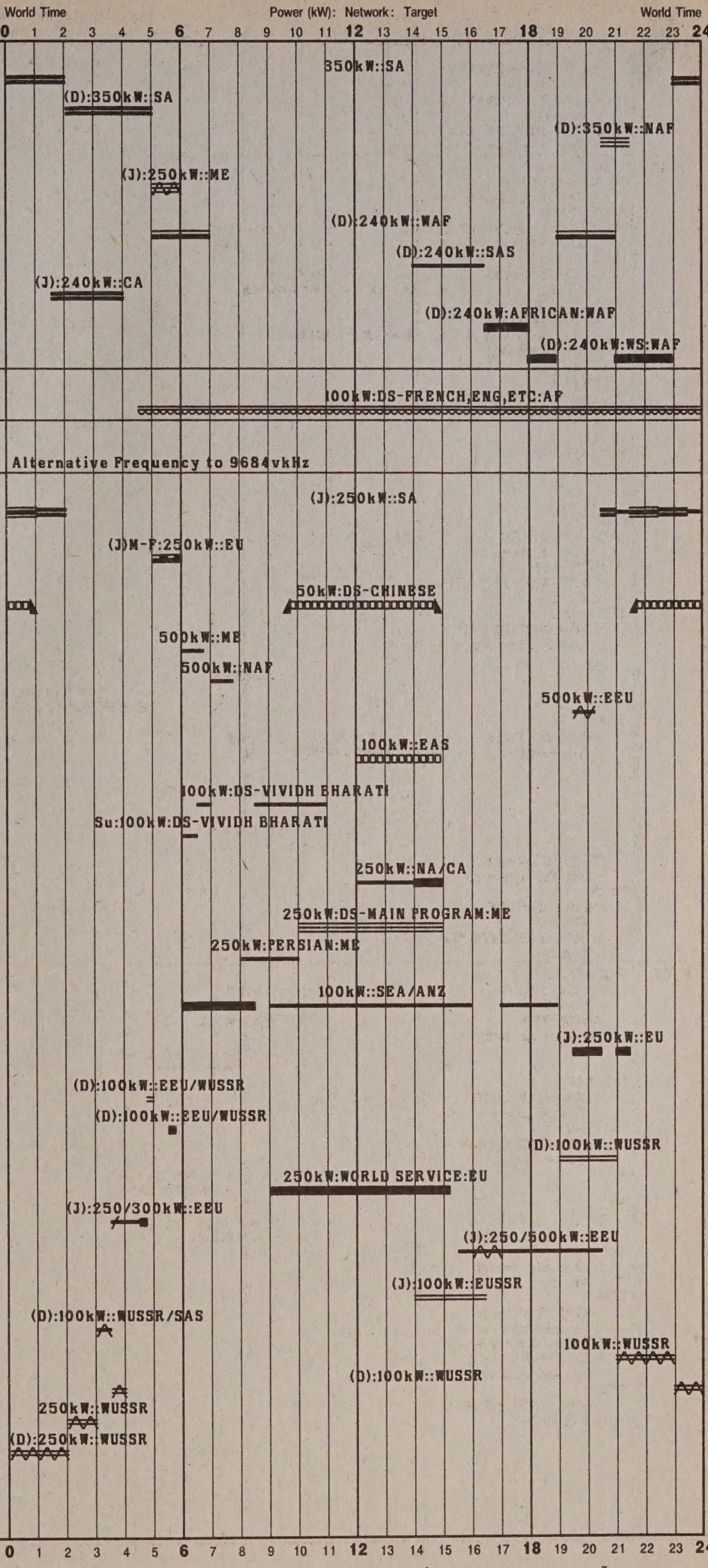


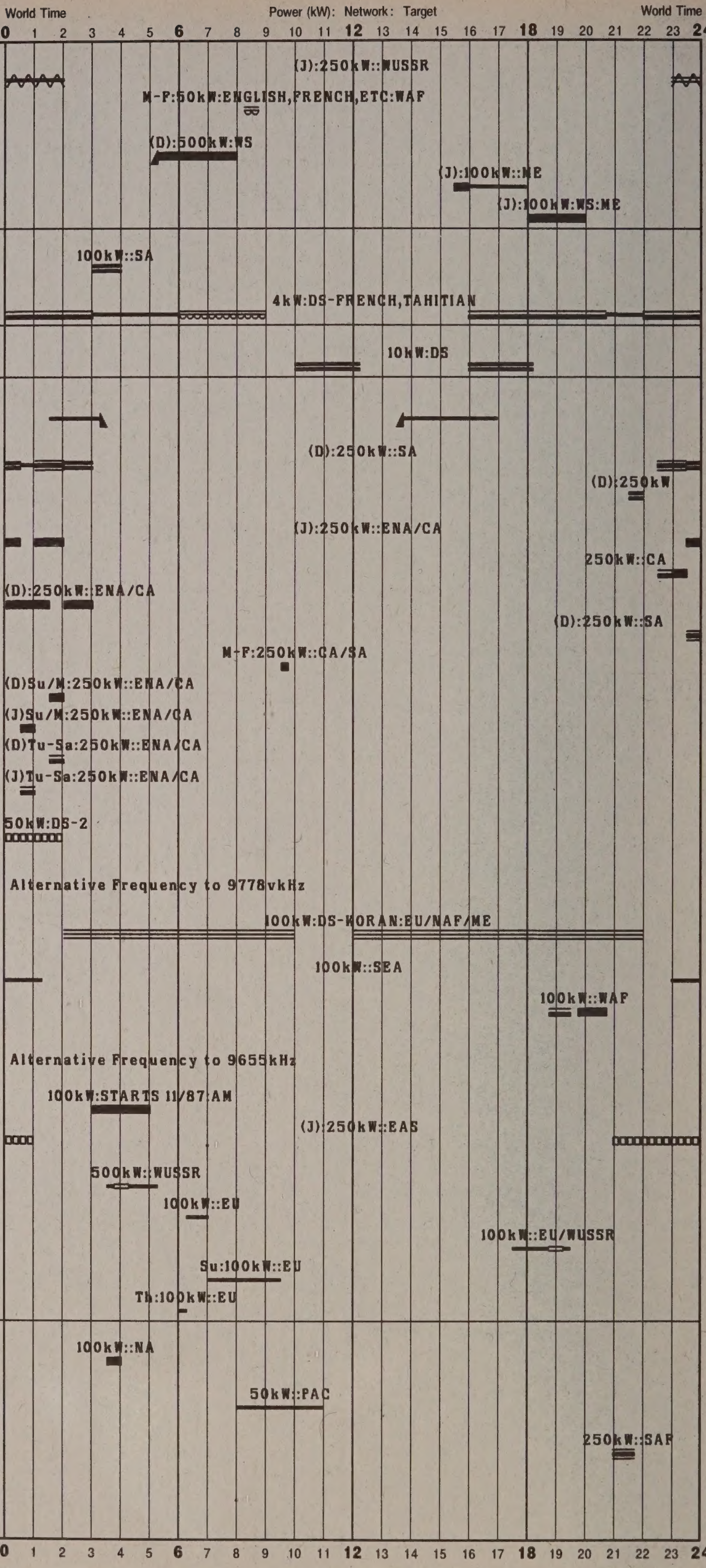
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9745	**SPAIN** R EXTERIOR ESPANA Noblejas	350kW::SA (D):350kW::SA (D):350kW::NAF
	USA VOICE OF AMERICA Via Kaválla, Greece	(J):250kW::ME
	USSR +RADIO MOSCOW/RP&P Moscow	(D):240kW::WAF
	+RADIO MOSCOW/RP&P Moscow	(D):240kW::SAS
	RADIO MOSCOW/RP&P Moscow	(J):240kW::CA
	+RADIO MOSCOW/RP&P Moscow	(D):240kW:AFRICAN:WAF
	+RADIO MOSCOW/RP&P Moscow	(D):240kW:WS:WAF
9746v	**CAMEROON** RADIO CAMEROON Yaoundé	100kW:DS-FRENCH,ENG,ETC:AF
9749v	**TANZANIA** RADIO TANZANIA Dar es Salaam	Alternative Frequency to 9684vkHz
9750	**BULGARIA** RADIO SOFIA Rebrovo-Sofia	(J):250kW::SA
	CANADA RADIO CANADA INTL Sackville, NB	(J)M-F:250kW::EU
	CHINA (PR) NEI MONGGOL PBS Hohhot	50kW:DS-CHINESE
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	500kW::ME 500kW::NAF 500kW::EEU
	GUAM KTWR-TRANS WORLD R Merizo	100kW::EAS
	INDIA ALL INDIA RADIO Madras	100kW:DS-VIVIDH BHARATI Su:100kW:DS-VIVIDH BHARATI
	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	250kW::NA/CA
	KUWAIT RADIO KUWAIT Jadādiyah	250kW:DS-MAIN PROGRAM:ME 250kW:PERSIAN:ME
	MALAYSIA VOICE OF MALAYSIA Kajang	100kW::SEA/ANZ
	ROMANIA RADIO BUCHAREST Bucharest	(J):250kW::EU
	UNITED KINGDOM +BBC Daventry	(D):100kW::EEU/WUSSR
	BBC Daventry	(D):100kW::EEU/WUSSR (D):100kW::WUSSR
	BBC Skelton, Cumbria	250kW:WORLD SERVICE:EU
	BBC Various Locations	(J):250/300kW::EEU (J):250/500kW::EEU
	USA KNLS-NEW LIFE STN Anchor Pt, Alaska	(J):100kW::EUSSR
	R FREE AFGHANISTAN Via Germany (FR)	(D):100kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	100kW::WUSSR (D):100kW::WUSSR
	RFE-RL Via Pals, Spain	250kW::WUSSR (D):250kW::WUSSR

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ≡

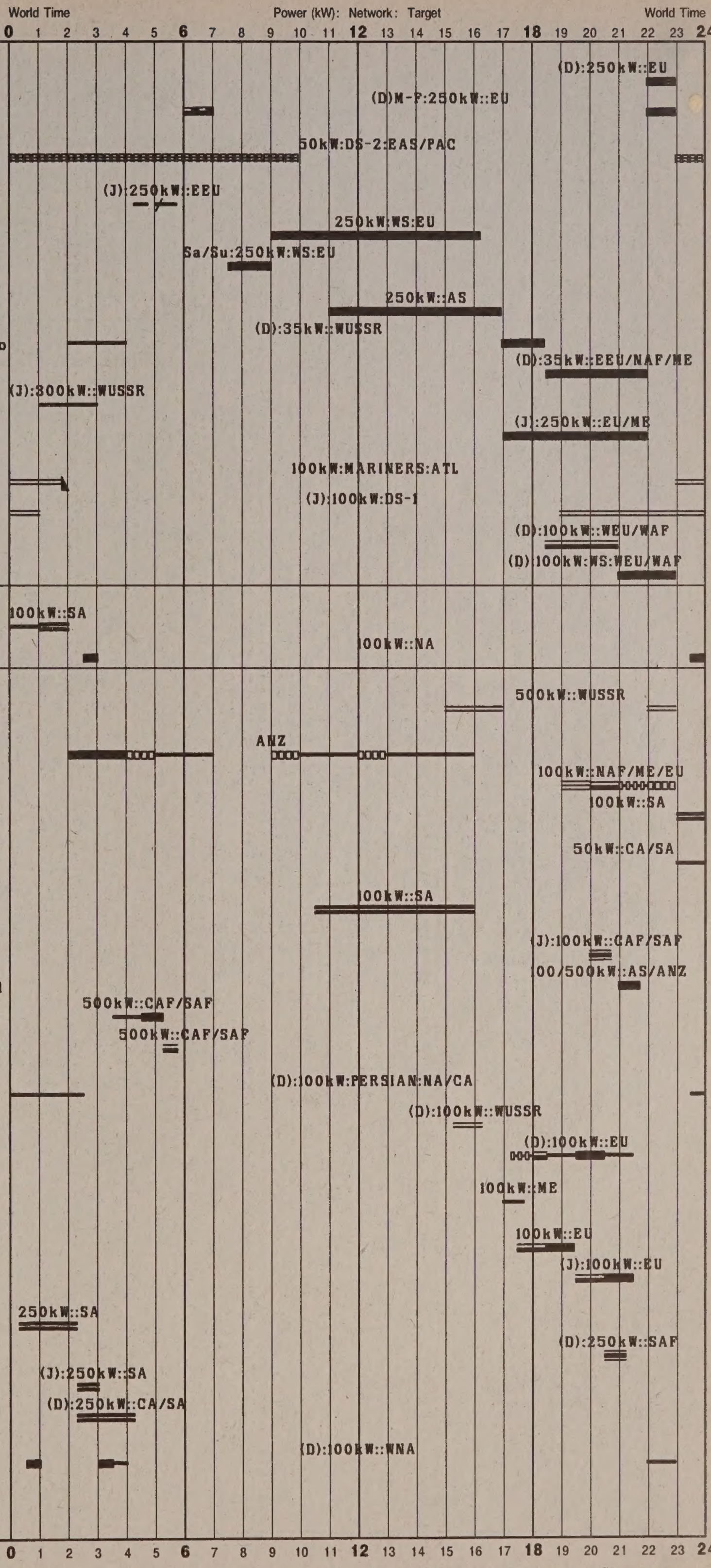
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▤ MULTILINGUAL ▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9750	USA	
	RFE-RL Via Pals, Spain	(J):250kW::WUSSR
	VOICE OF AMERICA Via M'rovia, Liberia	M-F:50kW:ENGLISH,FRENCH,ETC:WAF
	USSR	
	+RADIO MOSCOW/RP&P L'vov	(D):500kW:WS
	RADIO MOSCOW/RP&P Tashkent	(J):100kW::ME (J):100kW:WS:ME
9750v	ALBANIA	
	RADIO TIRANA Krujë	100kW::SA
	SOCIETY ISLANDS	
	RFO-TAHITI Papeete	4kW:DS-FRENCH,TAHITIAN
9750.2	CHILE	
	RADIO MINERIA Santiago	10kW:DS
9755	AFGHANISTAN	
	RADIO AFGHANISTAN Via USSR	
	BULGARIA	
	RADIO SOFIA Rebrovo-Sofia	(D):250kW::SA (D):250kW
	CANADA	
	RADIO CANADA INTL Sackville, NB	(J):250kW::ENA/CA 250kW::CA (D):250kW::ENA/CA (D):250kW::SA M-F:250kW::CA/SA (D)Su/M:250kW::ENA/CA (J)Su/M:250kW::ENA/CA (D)Tu-Sa:250kW::ENA/CA (J)Tu-Sa:250kW::ENA/CA
	CHINA (PR)	
	CENTRAL PEOPLES BS Baoji	50kW:DS-2
	DOMINICAN REPUBLIC	
	RADIO SANTIAGO Santiago	Alternative Frequency to 9778vkHz
	EGYPT	
	RADIO CAIRO Cairo-Mokattam	100kW:DS-KORAN:EU/NAF/ME
	INDIA	
	ALL INDIA RADIO Delhi	100kW::SEA 100kW::WAF
	SWEDEN	
	RADIO SWEDEN INTL Hörby	Alternative Frequency to 9655kHz
	USA	
	KUSW Salt Lake City,Utah	100kW:STARTS 11/87:AM
	VOICE OF AMERICA Via Philippines	(J):250kW::EAS
	VATICAN STATE	
	VATICAN RADIO Sta Maria di Galeria	500kW::WUSSR 100kW::EU 100kW::EU/WUSSR Su:100kW::EU Th:100kW::EU
9760	ALBANIA	
	RADIO TIRANA Lushnjë	100kW::NA
	AUSTRALIA	
	RADIO AUSTRALIA Shepparton	50kW::PAC
	BRAZIL	
	RADIO NACIONAL Brasília	250kW::SAF

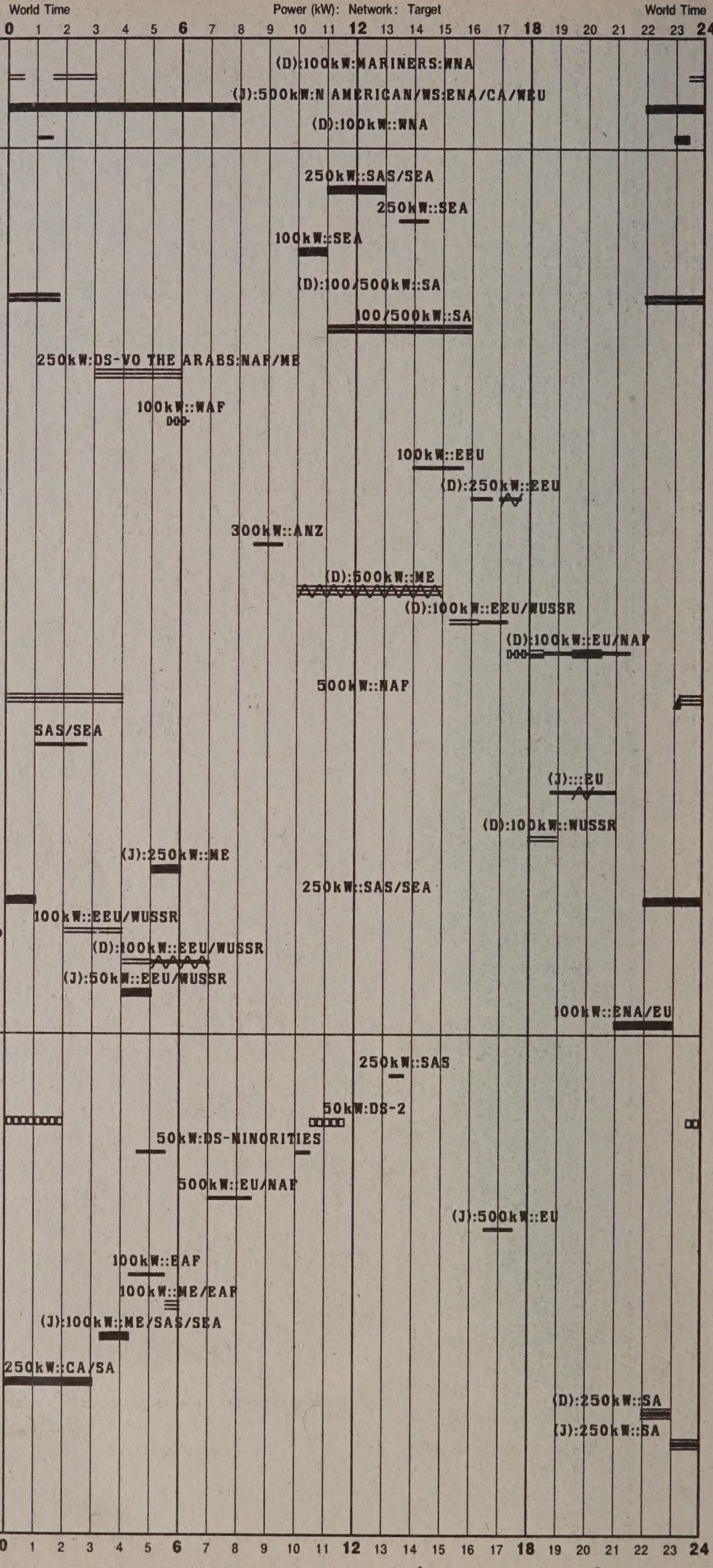


ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9760	CANADA RADIO CANADA INTL Sackville, NB	(D):250kW::EU (D)M-F:250kW::EU
	JAPAN NIHON SHORTWAVE BC Tōkyō-Nagara	50kW:DS-2:EAS/PAC
	UNITED KINGDOM BBC Skelton, Cumbria	(J):250kW::EEU 250kW:WS:EU Sa/Su:250kW:WS:EU
	USA VOICE OF AMERICA Via Philippines	250kW::AS
	VOICE OF AMERICA Via Tangier,Morocco	(D):35kW::WUSSR (D):35kW::EEU/NAF/ME
	VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR (J):250kW::EU/ME
	USSR RADIO MOSCOW Ivano-Frankovsk	100kW:MARINERS:ATL
	RADIO MOSCOW Kenga	(J):100kW:DS-1
	+RADIO MOSCOW/RP&P Ivano-Frankovsk	(D):100kW::WEU/WAF
	+RADIO MOSCOW/RP&P Ivano-Frankovsk	(D):100kW:WS:WEU/WAF
9760v	ALBANIA RADIO TIRANA Krujë	100kW::SA
	RADIO TIRANA Lushnjë	100kW::NA
9765	CHINA (PR) RADIO BEIJING Beijing	500kW::WUSSR
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	ANZ 100kW::NAF/ME/EU 100kW::SA
	DENMARK DANMARKS RADIO Copenhagen	50kW::CA/SA
	ECUADOR HCJB-VO THE ANDES Quito	100kW::SA
	GERMANY (FR) DEUTSCHE WELLE Jūlich	(J):100kW::CAF/SAF
	DEUTSCHE WELLE Jūlich/Türkheim-W'l	100/500kW::AS/ANZ
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::CAF/SAF
	DEUTSCHE WELLE Türkhein-Wertach'l	500kW::CAF/SAF
	IRAN VO THE ISLAMIC REP Tehrān	(D):100kW:PERSIAN:NA/CA (D):100kW::WUSSR (D):100kW::EU
	PAKISTAN RADIO PAKISTAN Islamabad	100kW::ME
	SPAIN R EXTERIOR ESPANA Arganda	100kW::EU (J):100kW::EU
	UNITED KINGDOM BBC Via Ascension	250kW::SA (D):250kW::SAF (J):250kW::SA
	BBC Via Delano, USA	(D):250kW::CA/SA
	USSR RADIO KIEV Khabarovsk	(D):100kW::WNA

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ☰
ARABIC / عربي ☰ RUSSIAN / PYCCKИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▤ MULTILINGUAL ▤ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9765	**USSR**	
	RADIO MOSCOW/RP&P Khabarovsk	(D):100kW:MARINERS:WNA
	RADIO MOSCOW/RP&P L'vov	(J):500kW:N AMERICAN/WS:ENA/CA/WEU
	RADIO VILNIUS Khabarovsk	(D):100kW::WNA
9770	**AUSTRALIA**	
	RADIO AUSTRALIA Carnarvon	250kW::SAS/SEA
	RADIO AUSTRALIA Darwin	250kW::SEA
	RADIO AUSTRALIA Shepparton	100kW::SEA
	CUBA	
	RADIO HABANA Havana	(D):100/500kW::SA 100/500kW::SA
	EGYPT	
	RADIO CAIRO Kafr Silim-Abis	250kW:DS-VO THE ARABS:NAF/ME
	GERMANY (DR)	
	RADIO BERLIN INTL Nauen	100kW::WAF
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	100kW::EEU
	DEUTSCHE WELLE Via Sines, Portugal	(D):250kW::EEU
	HOLLAND	
	RADIO NEDERLAND Via Neth Antilles	300kW::ANZ
	IRAN	
	VO THE ISLAMIC REP Tehrān	(D):500kW::ME (D):100kW::EEU/WUSSR (D):100kW::EU/NAF
	IRAQ	
	RADIO BAGHDAD Balad-Salah el Deen	500kW::NAF
	PAKISTAN	
	RADIO PAKISTAN Islamabad	SAS/SEA
	UNITED KINGDOM	
	BBC	(J):::EU
	USA	
	VOICE OF AMERICA Via Ismaning, GFR	(D):100kW::WUSSR
	VOICE OF AMERICA Via Kavála, Greece	(J):250kW::ME
	VOICE OF AMERICA Via Philippines	250kW::SAS/SEA
	VOICE OF AMERICA Via Tangier,Morocco	100kW::EEU/WUSSR (D):100kW::EEU/WUSSR (J):50kW::EEU/WUSSR
	WORLD HARVEST R Noblesville,Indiana	100kW::ENA/EU
9775	**BANGLADESH**	
	RADIO BANGLADESH Dhaka	250kW::SAS
	CHINA (PR)	
	CENTRAL PEOPLES BS Baoji	50kW:DS-2 50kW:DS-MINORITIES
	HOLLAND	
	RADIO NEDERLAND Flevoland	500kW::EU/NAF (J):500kW::EU
	ITALY	
	RTV ITALIANA Rome	100kW::EAF 100kW::ME/EAF (J):100kW::ME/SAS/SEA
	USA	
	VOICE OF AMERICA Greenville, NC	250kW::CA/SA
	VOICE OF AMERICA Via M'rovia, Liberia	(D):250kW::SA (J):250kW::SA

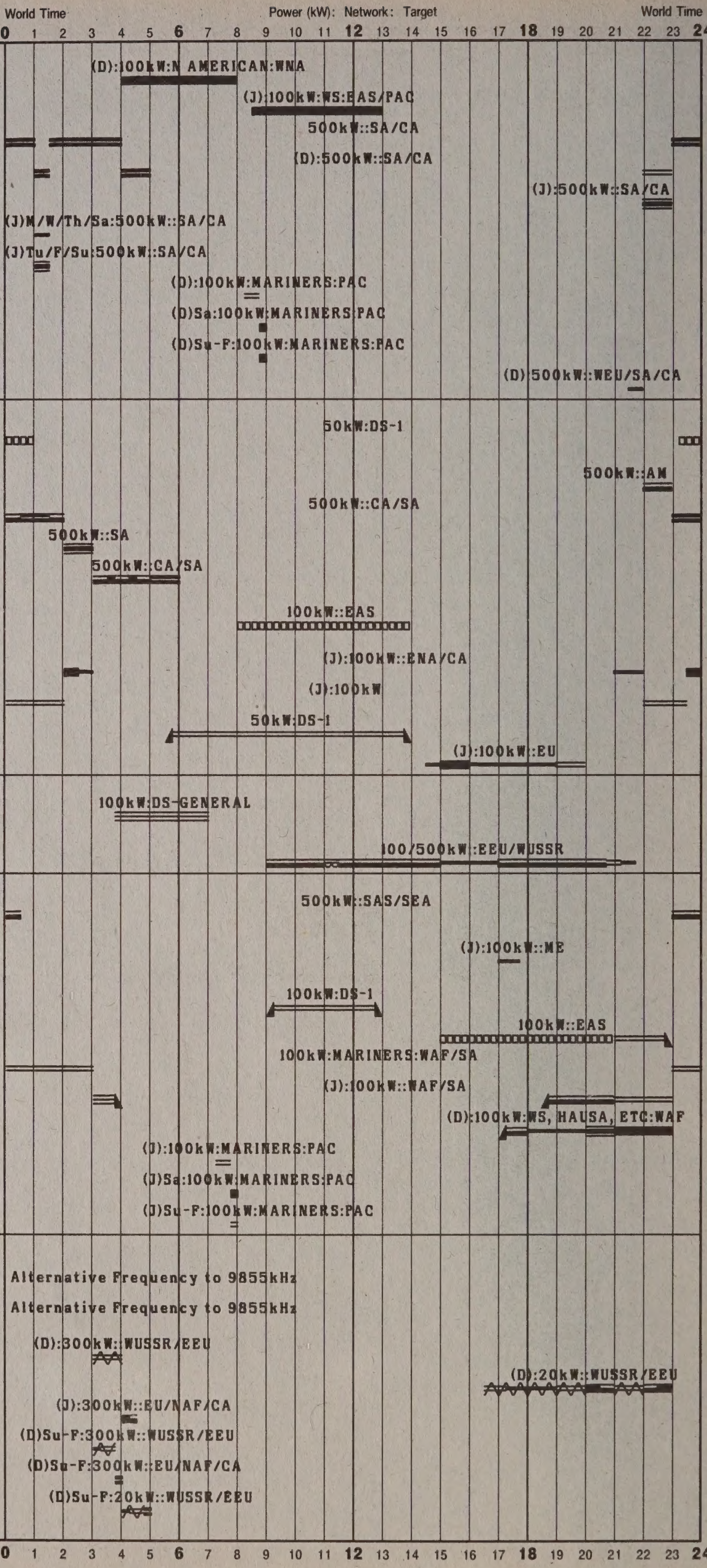
ENGLISH ▬ GERMAN / DEUTSCH ▭▭▭▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ = CHINESE / 中文 ▭▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9775	USSR	
	RADIO MOSCOW Michurinsk	(J):100kW:DS-1
	RADIO MOSCOW Tula	(D):100kW:DS-1 (J):100kW:DS-1
	RADIO MOSCOW/RP&P Tula	(D):100kW::EAF (D):100kW:AFRICAN:EAF (D):100kW:WS:EAF
9777	KOREA (DPR)	
	RADIO PYONGYANG Pyŏngyang	400kW::CA
9778v	DOMINICAN REPUBLIC	
	RADIO SANTIAGO Santiago	Alt 9755kHz:Irr::1kW:DS
9779.3	YEMEN (REPUBLIC)	
	"VO PALESTINE" Via Radio San'ā	50kW:PLO Irr::50kW:PLO
	RADIO SAN'A San'ā	50kW:DS F:50kW:DS
9780	CHINA (PR)	
	QINGHAI PBS Xining	10kW:DS
	USSR	
	KAZAKH RADIO Alma-Ata	50kW:DS-1 Sa:50kW:DS-1 Sa-M:50kW:DS-1 Su-F:50kW:DS-1 Tu-F:50kW:DS-1
	RADIO MOSCOW Chita	(J):100kW:DS-2
	RADIO MOSCOW/RP&P Kazan'	100kW::EU 100kW:WS:EU
	+RADIO MOSCOW/RP&P Nikolayevsk 'Amure	(D):100kW::EAS
	+RADIO MOSCOW/RP&P Nikolayevsk 'Amure	(D):200kW:WS:ANZ
9785	CHINA (PR)	
	RADIO BEIJING Xi'an	(J):120kW::EEU
	USSR	
	RADIO MOSCOW/RP&P	(J):::EAS
	RADIO MOSCOW/RP&P Vinnitsa	100kW::EU (D):100kW:WS:NAF/WAF
9790	BELGIUM	
	BELGISCHE RADIO TV Wavre	(J):100kW::ENA
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	500kW::AF 100/500kW::NAF (J):100/300kW::ENA/CA
	RADIO FRANCE INTL Via French Guiana	500kW::CA
	USSR	
	RADIO MOSCOW Zhigulevsk	(D):100kW:DS-1
9790v	ALBANIA	
	RADIO TIRANA Krujë	100kW::SA
9795	PORTUGAL	
	+RADIO PORTUGUESA Lisbon-São Gabriel	(J):100kW::CA/SA
	USSR	
	BELORUSSIAN RADIO Minsk	50kW:DS-1
	RADIO MOSCOW/RP&P	(J)::WS
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	(D):100kW::WNA (J):100kW::EAS/PAC
(con'd)		

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ═
ARABIC / عربی ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9795 (con'd)	**USSR**	
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	(D):100kW:N AMERICAN:WNA (J):100kW:WS:EAS/PAC
	RADIO MOSCOW/RP&P Tbilisi	500kW::SA/CA
	+RADIO MOSCOW/RP&P Tbilisi	(D):500kW::SA/CA
	RADIO MOSCOW/RP&P Tbilisi	(J):500kW::SA/CA (J)M/W/Th/Sa:500kW::SA/CA (J)Tu/F/Su:500kW::SA/CA
	RADIO TIKHIY OKEAN Komsomol'sk 'Amure	(D):100kW:MARINERS:PAC (D)Sa:100kW:MARINERS:PAC (D)Su-F:100kW:MARINERS:PAC
	RADIO YEREVAN Tbilisi	(D):500kW::WEU/SA/CA
9800	**CHINA (PR)**	
	CENTRAL PEOPLES BS Kunming	50kW:DS-1
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	500kW::AM
	RADIO FRANCE INTL Multiple Locations	500kW::CA/SA
	RADIO FRANCE INTL Via French Guiana	500kW::SA 500kW::CA/SA
	PHILIPPINES	
	FAR EAST BC CO Iba	100kW::EAS
	USSR	
	RADIO KIEV Kiev	(J):100kW::ENA/CA
	RADIO MOSCOW Kiev	(J):100kW
	RADIO MOSCOW Moscow	50kW:DS-1
	RADIO MOSCOW/RP&P Kazan'	(J):100kW::EU
9805	**EGYPT**	
	RADIO CAIRO Abu Za'bal	100kW:DS-GENERAL
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	100/500kW::EEU/WUSSR
9810	**FRANCE**	
	RADIO FRANCE INTL Issoudun-Allouis	500kW::SAS/SEA
	PAKISTAN	
	RADIO PAKISTAN Islamabad	(J):100kW::ME
	USSR	
	RADIO MOSCOW Khabarovsk	100kW:DS-1
	RADIO MOSCOW/RP&P Khabarovsk	100kW::EAS
	RADIO MOSCOW/RP&P Moscow	100kW:MARINERS:WAF/SA (J):100kW::WAF/SA (D):100kW:WS, HAUSA, ETC:WAF
	RADIO TIKHIY OKEAN Khabarovsk	(J):100kW:MARINERS:PAC (J)Sa:100kW:MARINERS:PAC (J)Su-F:100kW:MARINERS:PAC
9815	**GREECE**	
	FONI TIS HELLADAS Athens	Alternative Frequency to 9855kHz
	FONI TIS HELLADAS Kaválla	Alternative Frequency to 9855kHz
	ISRAEL	
	KOL ISRAEL Tel Aviv	(D):300kW::WUSSR/EEU (D):20kW::WUSSR/EEU (J):300kW::EU/NAF/CA (D)Su-F:300kW::WUSSR/EEU (D)Su-F:300kW::EU/NAF/CA (D)Su-F:20kW::WUSSR/EEU

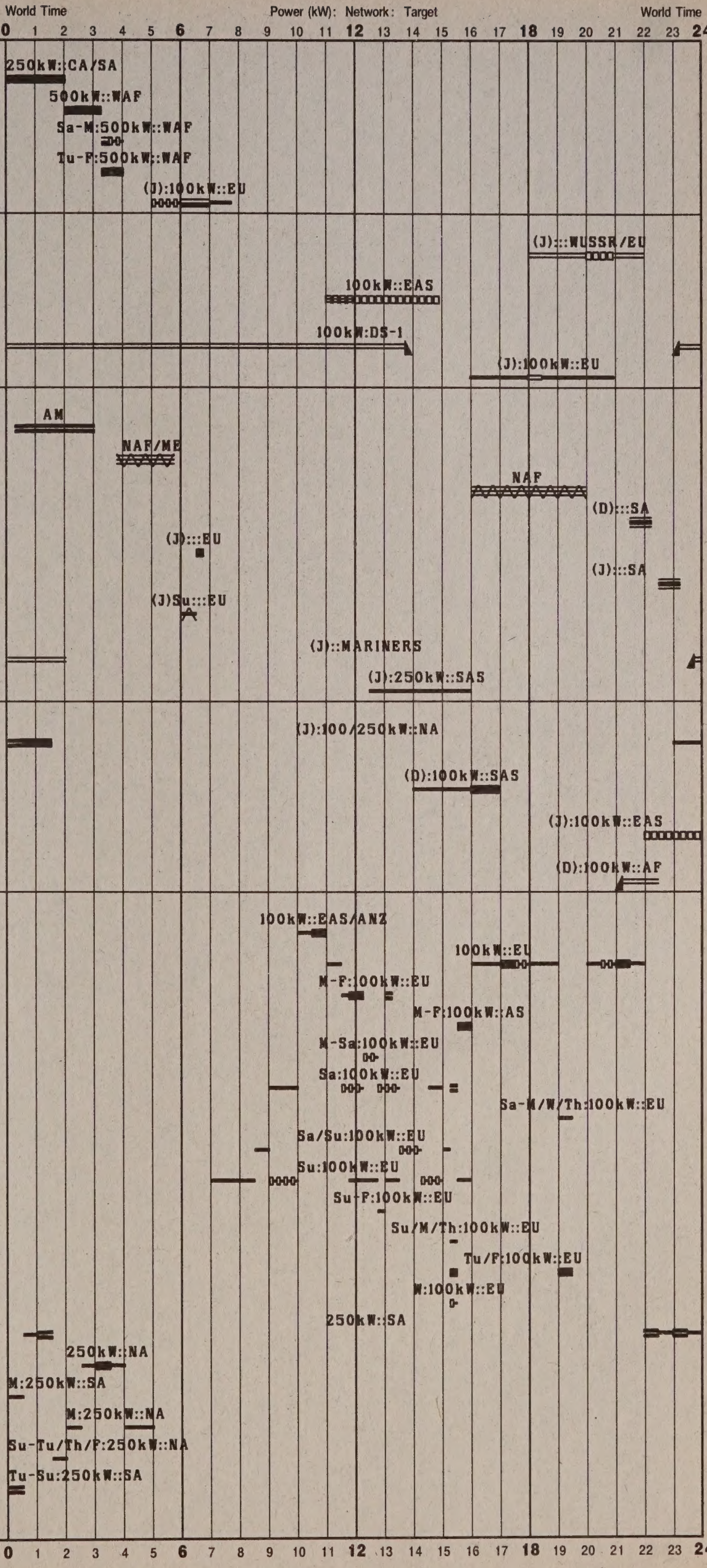


ENGLISH ▬ GERMAN / DEUTSCH ▭▭▭ FRENCH / FRANÇAIS ═══ PORTUGUESE / PORTUGUÊS ═══ SPANISH / ESPAÑOL ═══

ARABIC / عربي ═══ RUSSIAN / РУССКИЙ ═══ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬▬▬ MULTILINGUAL ═══ OTHER ───

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9815	USA	
	VOICE OF AMERICA Delano, California	250kW::CA/SA
	WCSN Olamon, Maine	500kW::WAF Sa-M:500kW::WAF Tu-F:500kW::WAF
	WYFR-FAMILY RADIO Okeechobee,Florida	(J):100kW::EU
9820	CHINA (PR) RADIO BEIJING	(J):::WUSSR/EU
	GUAM KTWR-TRANS WORLD R Merizo	100kW::EAS
	USSR RADIO MOSCOW Irkutsk	100kW:DS-1
	RADIO MOSCOW/RP&P Kalinin	(J):100kW::EU
9825	UNITED KINGDOM BBC Various Locations	AM NAF/ME NAF (D):::SA (J):::EU (J):::SA (J)Su:::EU
	USSR RADIO MOSCOW	(J)::MARINERS
	RADIO MOSCOW/RP&P Ul'yanovsk	(J):250kW::SAS
9830	BELGIUM BELGISCHE RADIO TV Wavre	(J):100/250kW::NA
	GUAM ADVENTIST WORLD R Agat	(D):100kW::SAS
	PHILIPPINES FAR EAST BC CO Iba	(J):100kW::EAS
	USSR +RADIO MOSCOW/RP&P Krasnodar	(D):100kW::AF
9835	HUNGARY RADIO BUDAPEST Erd-Diósd	100kW::EAS/ANZ 100kW::EU M-F:100kW::EU M-F:100kW::AS M-Sa:100kW::EU Sa:100kW::EU Sa-M/W/Th:100kW::EU Sa/Su:100kW::EU Su:100kW::EU Su-F:100kW::EU Su/M/Th:100kW::EU Tu/F:100kW::EU W:100kW::EU
	RADIO BUDAPEST Jászberény	250kW::SA 250kW::NA M:250kW::SA M:250kW::NA Su-Tu/Th/F:250kW::NA Tu-Su:250kW::SA
(con'd)		



ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ☰

ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —

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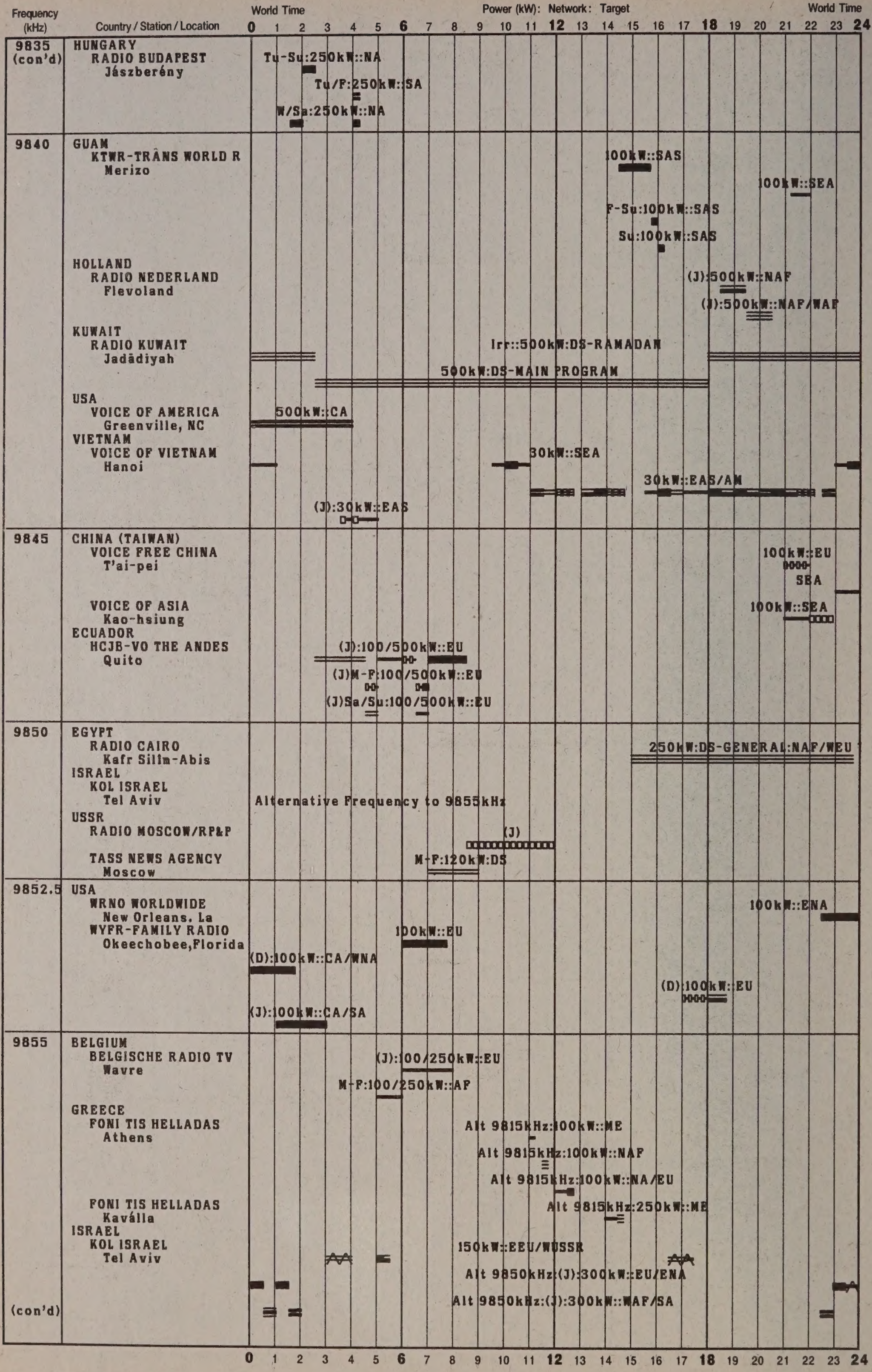

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭▭ OTHER —
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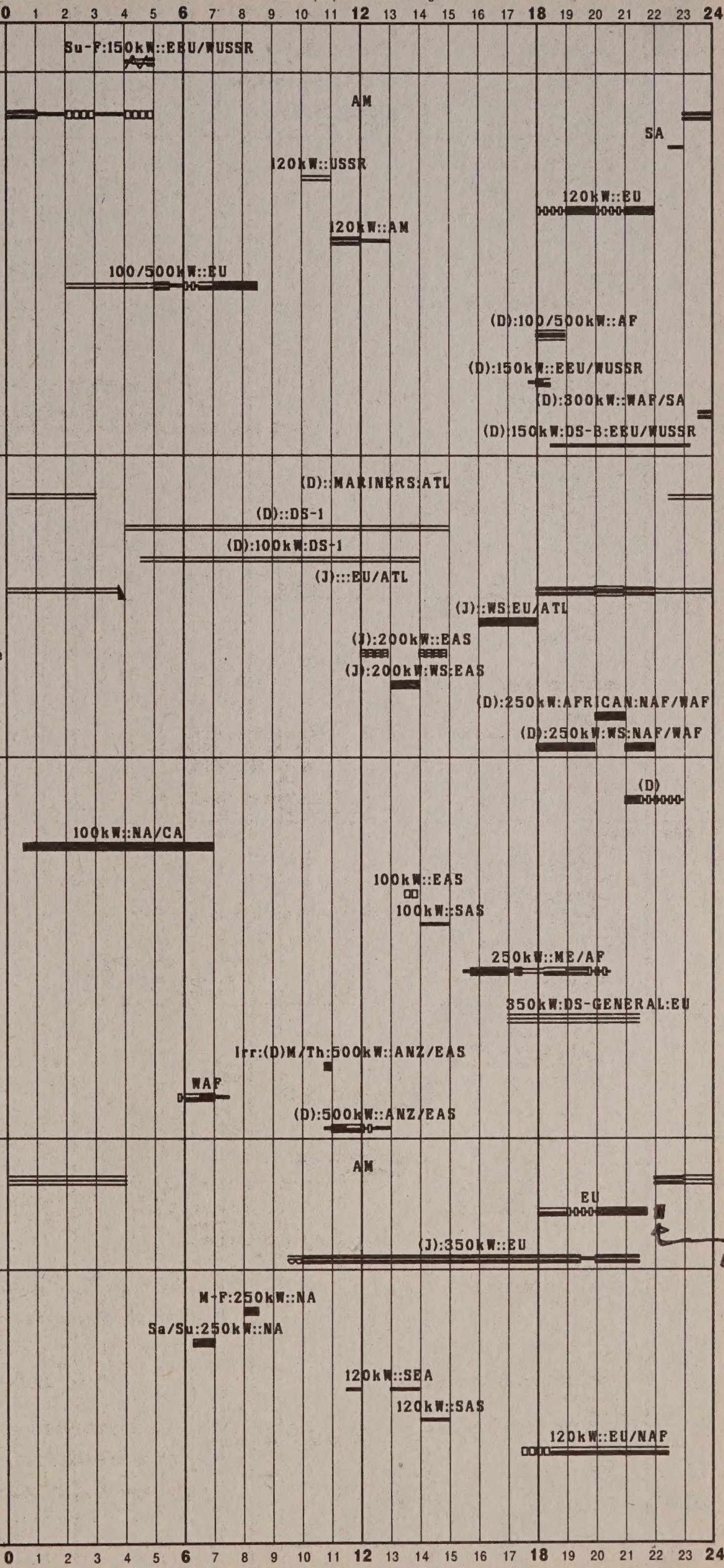

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9855 (con'd)	**ISRAEL**	
	KOL ISRAEL Tel Aviv	Su-F:150kW::EEU/WUSSR
9860	**CHINA (PR)**	
	RADIO BEIJING	AM SA
	RADIO BEIJING Kunming	120kW::USSR 120kW::EU
	RADIO BEIJING Xi'an	120kW::AM
	ECUADOR	
	HCJB-VO THE ANDES Quito	100/500kW::EU
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	(D):100/500kW::AF
	ISRAEL	
	KOL ISRAEL Tel Aviv	(D):150kW::EEU/WUSSR (D):300kW::WAF/SA
	RASHUTH HASHIDUR Tel Aviv	(D):150kW:DS-B:EEU/WUSSR
9865	**USSR**	
	+RADIO MOSCOW	(D)::MARINERS:ATL
	RADIO MOSCOW	(D)::DS-1
	+RADIO MOSCOW Ul'yanovsk	(D):100kW:DS-1
	RADIO MOSCOW/RP&P Alma-Ata	(J):::EU/ATL (J)::WS:EU/ATL
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	(J):200kW::EAS (J):200kW:WS:EAS
	+RADIO MOSCOW/RP&P Krasnodar	(D):250kW:AFRICAN:NAF/WAF
	+RADIO MOSCOW/RP&P Krasnodar	(D):250kW:WS:NAF/WAF
9870	**AUSTRIA**	
	+RADIO AUSTRIA INTL Vienna	(D)
	ECUADOR	
	HCJB-VO THE ANDES Quito	100kW::NA/CA
	GUAM	
	KTWR-TRANS WORLD R Merizo	100kW::EAS 100kW::SAS
	KOREA (REPUBLIC)	
	RADIO KOREA In-Kimjae	250kW::ME/AF
	SAUDI ARABIA	
	BS OF THE KINGDOM Riyadh	350kW:DS-GENERAL:EU
	SWITZERLAND	
	RED CROSS BC SVC Sottens	Irr:(D)M/Th:500kW::ANZ/EAS
	SWISS RADIO INTL	WAF
	SWISS RADIO INTL Sottens	(D):500kW::ANZ/EAS
9875	**IRAQ**	
	RADIO BAGHDAD	AM EU
	SPAIN	
	R EXTERIOR ESPANA Noblejas	(J):350kW::EU
9880	**BELGIUM**	
	BELGISCHE RADIO TV Wavre	M-F:250kW::NA Sa/Su:250kW::NA
	CHINA (PR)	
	RADIO BEIJING Beijing	120kW::SEA 120kW::SAS
(con'd)	RADIO BEIJING Xi'an	120kW::EU/NAF

10 OCT 87
EXC. SIGNAL

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ☰ SPANISH / ESPAÑOL ☰

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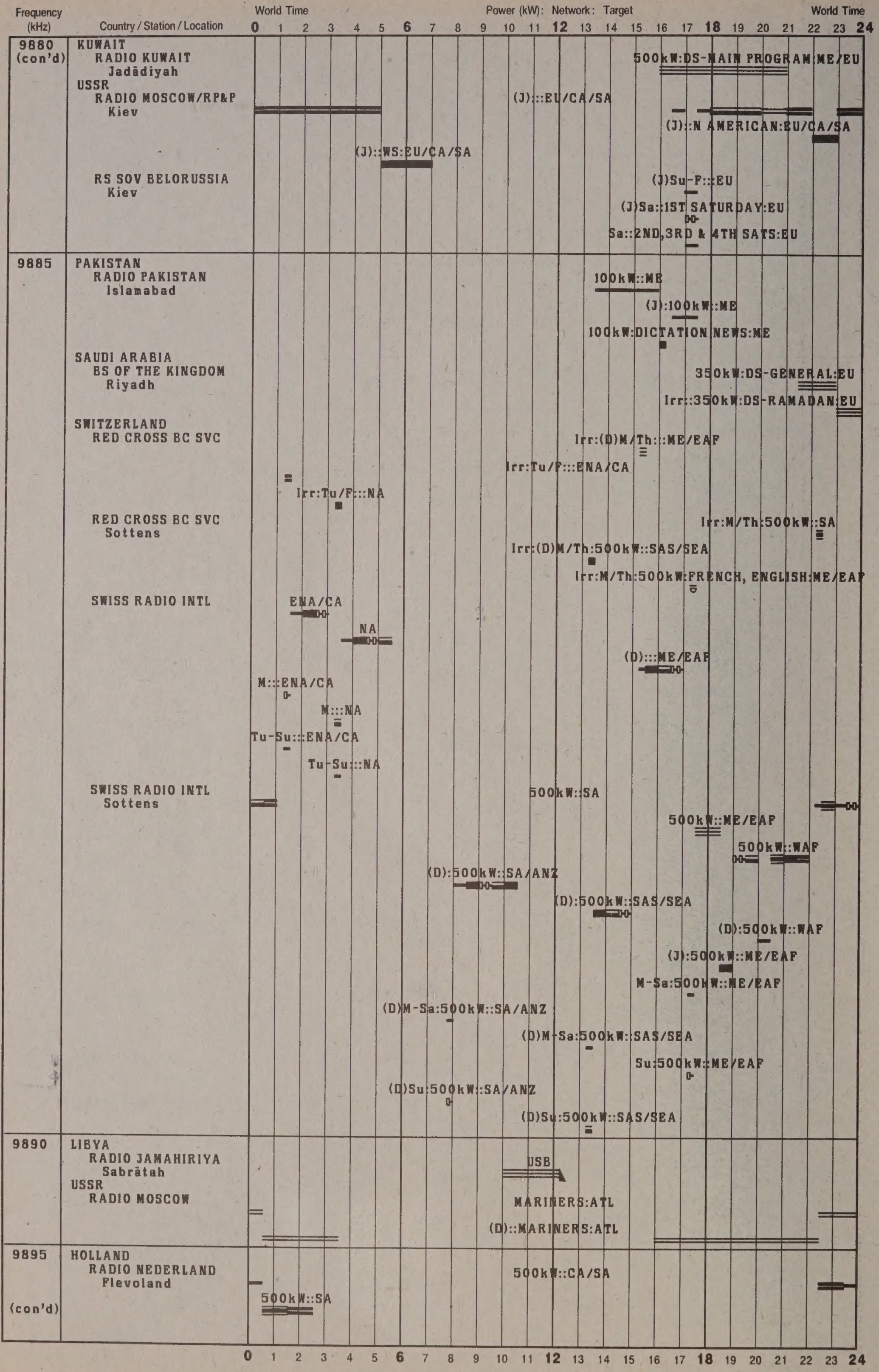
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



9880 (con'd)

KUWAIT
RADIO KUWAIT
Jadâdiyah
500kW:DS-MAIN PROGRAM:ME/EU

USSR
RADIO MOSCOW/RP&P
Kiev
(J):::EU/CA/SA
(J)::N AMERICAN:EU/CA/SA
(J)::WS:EU/CA/SA

RS SOV BELORUSSIA
Kiev
(J)Su-F:::EU
(J)Sa::1ST SATURDAY:EU
Sa::2ND,3RD & 4TH SATS:EU

9885

PAKISTAN
RADIO PAKISTAN
Islamabad
100kW::ME
(J):100kW::ME
100kW:DICTATION NEWS:ME

SAUDI ARABIA
BS OF THE KINGDOM
Riyadh
350kW:DS-GENERAL:EU
Irr::350kW:DS-RAMADAN:EU

SWITZERLAND
RED CROSS BC SVC
Irr:(D)M/Th:::ME/EAF
Irr:Tu/F:::ENA/CA
Irr:Tu/F:::NA

RED CROSS BC SVC
Sottens
Irr:M/Th:500kW::SA
Irr:(D)M/Th:500kW::SAS/SEA
Irr:M/Th:500kW:FRENCH, ENGLISH:ME/EAF

SWISS RADIO INTL
ENA/CA
NA
(D):::ME/EAF
M:::ENA/CA
M:::NA
Tu-Su:::ENA/CA
Tu-Su:::NA

SWISS RADIO INTL
Sottens
500kW::SA
500kW::ME/EAF
500kW::WAF
(D):500kW::SA/ANZ
(D):500kW::SAS/SEA
(D):500kW::WAF
(J):500kW::ME/EAF
M-Sa:500kW::ME/EAF
(D)M-Sa:500kW::SA/ANZ
(D)M-Sa:500kW::SAS/SEA
Su:500kW::ME/EAF
(D)Su:500kW::SA/ANZ
(D)Su:500kW::SAS/SEA

9890

LIBYA
RADIO JAMAHIRIYA
Sabrâtah
USB

USSR
RADIO MOSCOW
MARINERS:ATL
(D)::MARINERS:ATL

9895

HOLLAND
RADIO NEDERLAND
Flevoland
500kW::CA/SA
500kW::SA

(con'd)

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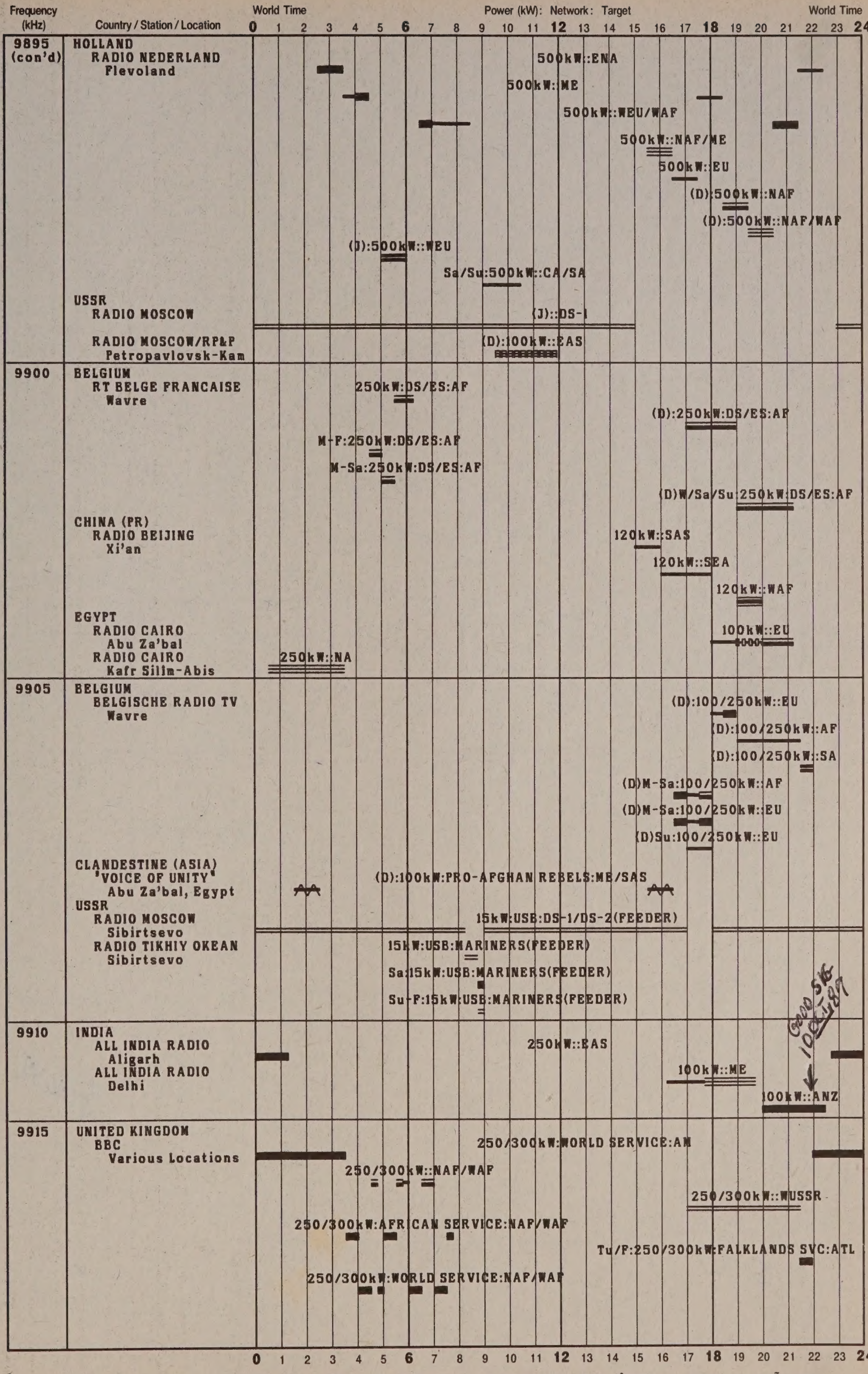

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9895 (con'd)	**HOLLAND** **RADIO NEDERLAND** **Flevoland**	500kW::ENA 500kW::ME 500kW::WEU/WAF 500kW::NAF/ME 500kW::EU (D):500kW::NAF (D):500kW::NAF/WAF (J):500kW::WEU Sa/Su:500kW::CA/SA
	USSR **RADIO MOSCOW**	(J)::DS-1
	RADIO MOSCOW/RP&P **Petropavlovsk-Kam**	(D):100kW::EAS
9900	**BELGIUM** **RT BELGE FRANCAISE** **Wavre**	250kW:DS/ES:AF (D):250kW:DS/ES:AF M-F:250kW:DS/ES:AF M-Sa:250kW:DS/ES:AF (D)W/Sa/Su:250kW:DS/ES:AF
	CHINA (PR) **RADIO BEIJING** **Xi'an**	120kW::SAS 120kW::SEA 120kW::WAF
	EGYPT **RADIO CAIRO** **Abu Za'bal**	100kW::EU
	RADIO CAIRO **Kafr Silim-Abis**	250kW::NA
9905	**BELGIUM** **BELGISCHE RADIO TV** **Wavre**	(D):100/250kW::EU (D):100/250kW::AF (D):100/250kW::SA (D)M-Sa:100/250kW::AF (D)M-Sa:100/250kW::EU (D)Su:100/250kW::EU
	CLANDESTINE (ASIA) **'VOICE OF UNITY'** **Abu Za'bal, Egypt**	(D):100kW:PRO-AFGHAN REBELS:ME/SAS
	USSR **RADIO MOSCOW** **Sibirtsevo**	15kW:USB:DS-1/DS-2(FEEDER)
	RADIO TIKHIY OKEAN **Sibirtsevo**	15kW:USB:MARINERS(FEEDER) Sa:15kW:USB:MARINERS(FEEDER) Su-F:15kW:USB:MARINERS(FEEDER)
9910	**INDIA** **ALL INDIA RADIO** **Aligarh**	250kW::EAS
	ALL INDIA RADIO **Delhi**	100kW::ME 100kW::ANZ
9915	**UNITED KINGDOM** **BBC** **Various Locations**	250/300kW:WORLD SERVICE:AM 250/300kW::NAF/WAF 250/300kW::WUSSR 250/300kW:AFRICAN SERVICE:NAF/WAF Tu/F:250/300kW:FALKLANDS SVC:ATL 250/300kW:WORLD SERVICE:NAF/WAF

Good S/6
10-Oct-87

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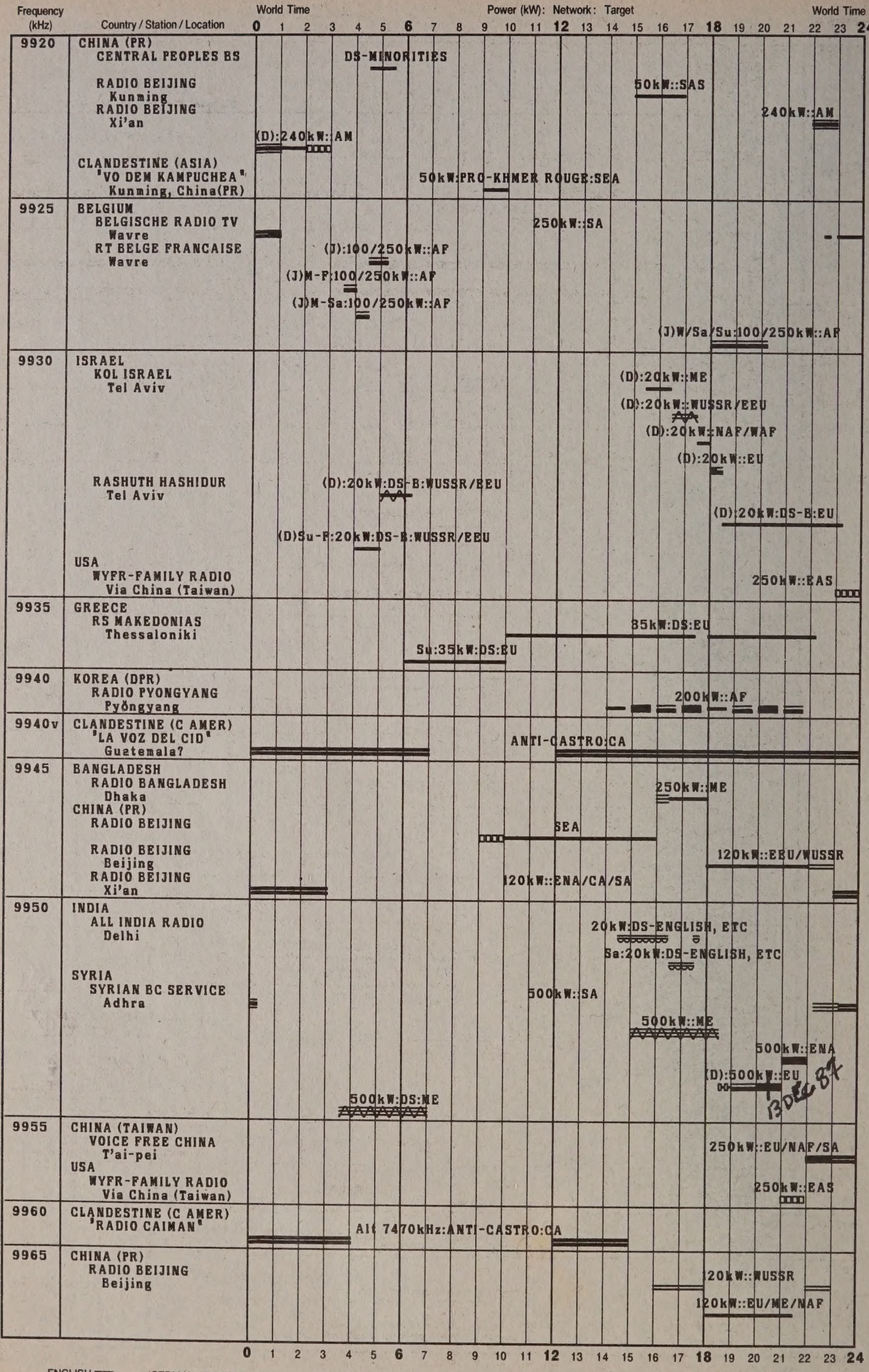

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9920	CHINA (PR) CENTRAL PEOPLES BS	DS-MINORITIES
	RADIO BEIJING Kunming	50kW::SAS
	RADIO BEIJING Xi'an	240kW::AM (D):240kW::AM
	CLANDESTINE (ASIA) "VO DEM KAMPUCHEA" Kunming, China(PR)	50kW:PRO-KHMER ROUGE:SEA
9925	BELGIUM BELGISCHE RADIO TV Wavre	250kW::SA
	RT BELGE FRANCAISE Wavre	(J):100/250kW::AF (J)M-F:100/250kW::AF (J)M-Sa:100/250kW::AF (J)W/Sa/Su:100/250kW::AF
9930	ISRAEL KOL ISRAEL Tel Aviv	(D):20kW::ME (D):20kW::WUSSR/EEU (D):20kW::NAF/WAF (D):20kW::EU
	RASHUTH HASHIDUR Tel Aviv	(D):20kW:DS-B:WUSSR/EEU (D):20kW:DS-B:EU (D)Su-F:20kW:DS-B:WUSSR/EEU
	USA WYFR-FAMILY RADIO Via China (Taiwan)	250kW::EAS
9935	GREECE RS MAKEDONIAS Thessaloniki	35kW:DS:EU Su:35kW:DS:EU
9940	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	200kW::AF
9940v	CLANDESTINE (C AMER) "LA VOZ DEL CID" Guatemala?	ANTI-CASTRO:CA
9945	BANGLADESH RADIO BANGLADESH Dhaka	250kW::ME
	CHINA (PR) RADIO BEIJING	SEA
	RADIO BEIJING Beijing	120kW::EEU/WUSSR
	RADIO BEIJING Xi'an	120kW::ENA/CA/SA
9950	INDIA ALL INDIA RADIO Delhi	20kW:DS-ENGLISH, ETC Sa:20kW:DS-ENGLISH, ETC
	SYRIA SYRIAN BC SERVICE Adhra	500kW::SA 500kW::ME 500kW::ENA (D):500kW::EU 3 DEC 87 500kW:DS:ME
9955	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	250kW::EU/NAF/SA
	USA WYFR-FAMILY RADIO Via China (Taiwan)	250kW::EAS
9960	CLANDESTINE (C AMER) "RADIO CAIMAN"	Alt 7470kHz:ANTI-CASTRO:CA
9965	CHINA (PR) RADIO BEIJING Beijing	120kW::WUSSR 120kW::EU/ME/NAF

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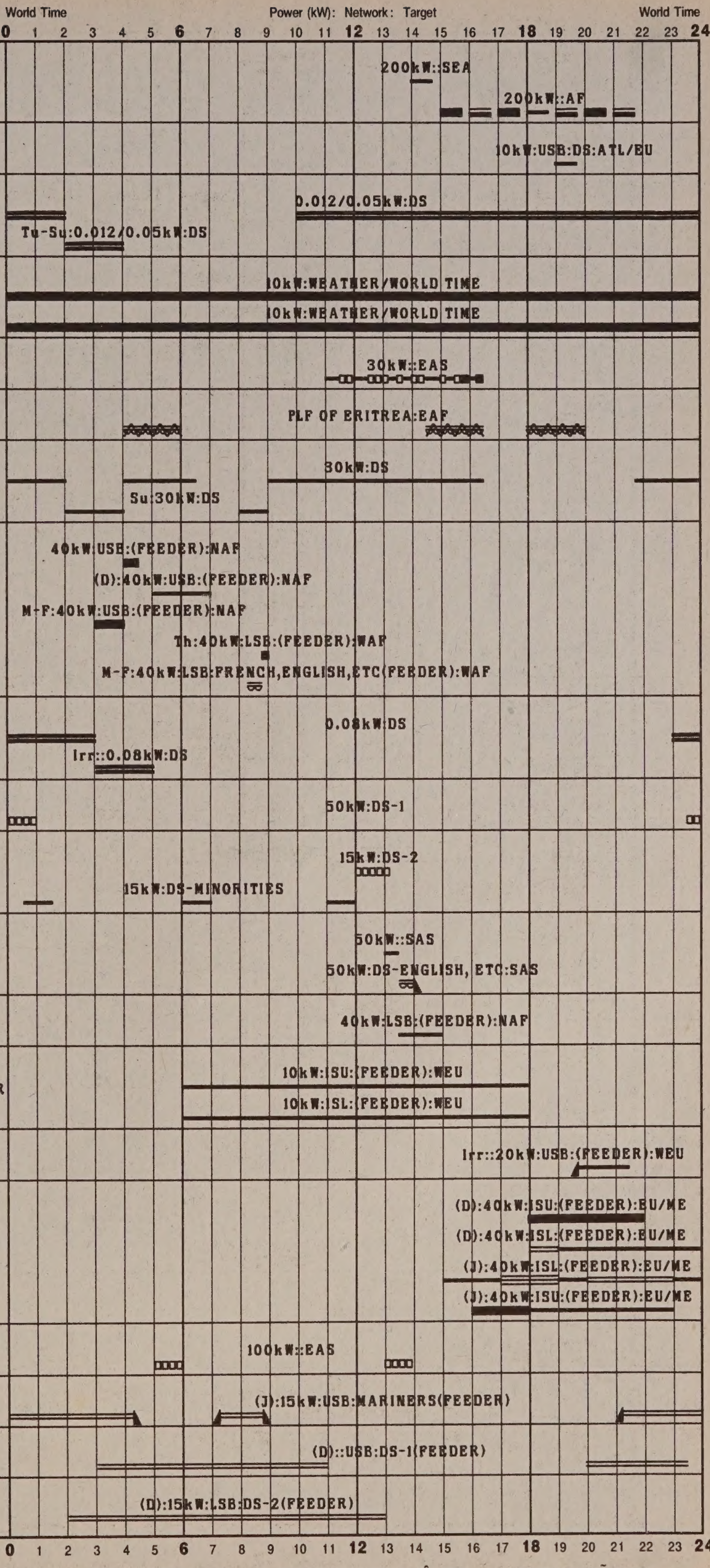
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
9977	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	200kW::SEA 200kW::AF
9985	ICELAND RIKISUTVARPID Reykjavik	10kW:USB:DS:ATL/EU
9988	PERU ESTACION 2000 Rioja	0.012/0.05kW:DS Tu-Su:0.012/0.05kW:DS
10000	USA WWV Fort Collins, Colo WWVH Kekaha, Hawaii	10kW:WEATHER/WORLD TIME 10kW:WEATHER/WORLD TIME
10010	VIETNAM VOICE OF VIETNAM Hanoi	30kW::EAS
10010v	CLANDESTINE (AFRICA) 'VO BROAD MASSES' Argadom, Ethiopia	PLF OF ERITREA:EAF
10059	VIETNAM VOICE OF VIETNAM Hanoi	30kW:DS Su:30kW:DS
10235	USA VOICE OF AMERICA Greenville, NC	40kW:USB:(FEEDER):NAF (D):40kW:USB:(FEEDER):NAF M-F:40kW:USB:(FEEDER):NAF Th:40kW:LSB:(FEEDER):WAF M-F:40kW:LSB:FRENCH,ENGLISH,ETC(FEEDER):WAF
10243v	PERU RADIO FUTURO Calzada	0.08kW:DS Irr::0.08kW:DS
10245	CHINA (PR) CENTRAL PEOPLES BS Beijing	50kW:DS-1
10260	CHINA (PR) CENTRAL PEOPLES BS Beijing	15kW:DS-2 15kW:DS-MINORITIES
10335	INDIA ALL INDIA RADIO Delhi	50kW::SAS 50kW:DS-ENGLISH, ETC:SAS
10380	USA VOICE OF AMERICA Greenville, NC	40kW:LSB:(FEEDER):NAF
10420	USA RFE-RL Via Holzkirchen,GFR	10kW:ISU:(FEEDER):WEU 10kW:ISL:(FEEDER):WEU
10440	GERMANY (FR) DEUTSCHE WELLE Elmshorn	Irr::20kW:USB:(FEEDER):WEU
10454	USA VOICE OF AMERICA Greenville, NC	(D):40kW:ISU:(FEEDER):EU/ME (D):40kW:ISL:(FEEDER):EU/ME (J):40kW:ISL:(FEEDER):EU/ME (J):40kW:ISU:(FEEDER):EU/ME
10510v	ALBANIA RADIO TIRANA Krujë	100kW::EAS
10670	USSR RADIO MOSCOW Moscow	(J):15kW:USB:MARINERS(FEEDER)
10690	USSR +RADIO MOSCOW	(D)::USB:DS-1(FEEDER)
10855	USSR +RADIO MOSCOW Sverdlovsk	(D):15kW:LSB:DS-2(FEEDER)



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ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER ─
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Frequency (kHz)	Country / Station / Location	World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 — Power (kW): Network: Target
10860	USA RFE-RL Via Holzkirchen,GFR	Irr::10kW:ISU:(FEEDER):WEU Irr::10kW:ISL:(FEEDER):WEU
10869	USA VOICE OF AMERICA Cincinnati, Ohio	50kW:ISL:(FEEDER):WAF 50kW:ISU:(FEEDER):WAF M-F:50kW:ISU:(FEEDER):WAF Th:50kW:ISL:(FEEDER):WAF M-F:50kW:ISL:ENGLISH,FRENCH,ETC(FEEDER):WAF
10870v	CLANDESTINE (M EAST) 'R IRAN TOILERS' Afghanistan	TUDEH COMMUNIST:ME
10922	GERMANY (FR) DEUTSCHE WELLE Elmshorn	Irr::20kW:USB:(FEEDER):WEU
10945.8	CHINA (PR) HUNAN METEOROLOGY	EAS
11000	CHINA (PR) CENTRAL PEOPLES BS	TAIWAN-2
11030	GERMANY (FR) DEUTSCHE WELLE Elmshorn	20kW:USB:(FEEDER):WEU
11040	CHINA (PR) CENTRAL PEOPLES BS	DS-2 Th/Sa-Tu::DS-2
11055	ARGENTINA RADIO CONTINENTAL Buenos Aires	Irr:::ISL:DS(FEEDER) Irr:::ISU:DS(FEEDER)
	RADIO DEL PLATA Buenos Aires	Irr:::ISU:DS(FEEDER) Irr:::ISL:DS(FEEDER)
11090	USA VOICE OF AMERICA Delano, California	(D):50kW:ISL:(FEEDER):SEA (D):50kW:ISU:(FEEDER):SEA (J):50kW:ISL:(FEEDER):SEA (J):50kW:ISU:(FEEDER):SEA (D)M-F:50kW:ISU:(FEEDER):SEA
11100	CHINA (PR) CENTRAL PEOPLES BS Beijing	120kW:TAIWAN-1
11290	CHINA (PR) CENTRAL PEOPLES BS	DS-1 W-M::DS-1
11330	CHINA (PR) CENTRAL PEOPLES BS	DS-1 W-M::DS-1
11335	KOREA (DPR) RADIO PYONGYANG Pyŏngyang	Alternative Frequency to 6540kHz
11375	CHINA (PR) CENTRAL PEOPLES BS	DS-MINORITIES
11445	CHINA (PR) RADIO BEIJING Kunming	240kW:SA/EU/WAF 50kW::SEA
11490	CHINA (PR) RADIO BEIJING	(J):::SAS/ME
	CLANDESTINE (ASIA) 'VOICE OF UNITY' Abu Za'bal, Egypt	100kW:PRO-AFGHAN REBELS:ME/SAS Irr::100kW:PRO-AFGHAN REBELS:ME/SAS
11500	CHINA (PR) RADIO BEIJING Beijing	120kW::WUSSR

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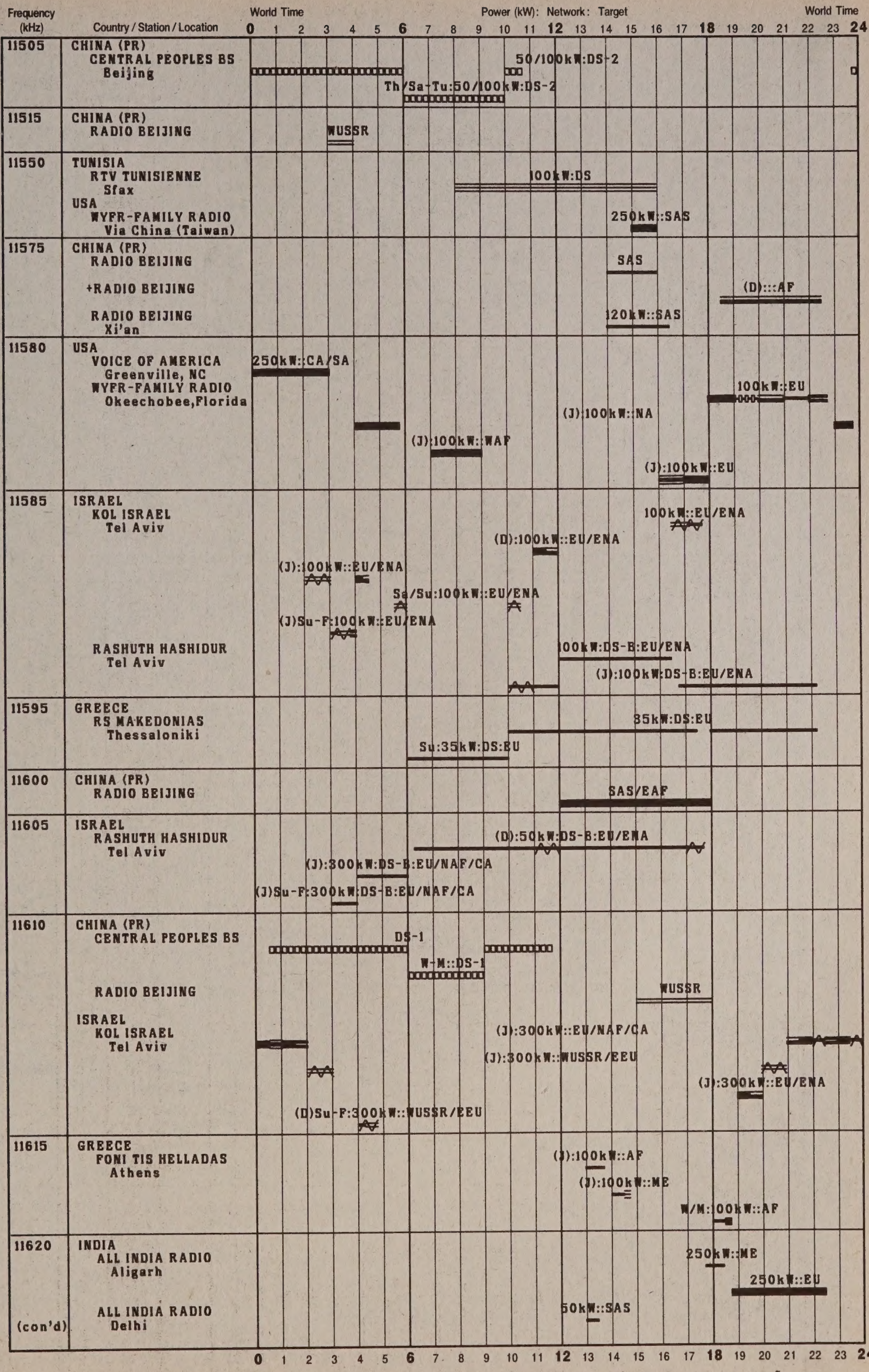

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11505	CHINA (PR) CENTRAL PEOPLES BS Beijing	50/100kW:DS-2 Th/Sa-Tu:50/100kW:DS-2
11515	CHINA (PR) RADIO BEIJING	WUSSR
11550	TUNISIA RTV TUNISIENNE Sfax	100kW:DS
	USA WYFR-FAMILY RADIO Via China (Taiwan)	250kW::SAS
11575	CHINA (PR) RADIO BEIJING	SAS
	+RADIO BEIJING	(D):::AF
	RADIO BEIJING Xi'an	120kW::SAS
11580	USA VOICE OF AMERICA Greenville, NC	250kW::CA/SA
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::EU (J):100kW::NA (J):100kW::WAF (J):100kW::EU
11585	ISRAEL KOL ISRAEL Tel Aviv	100kW::EU/ENA (D):100kW::EU/ENA (J):100kW::EU/ENA Sa/Su:100kW::EU/ENA (J)Su-F:100kW::EU/ENA
	RASHUTH HASHIDUR Tel Aviv	100kW:DS-B:EU/ENA (J):100kW:DS-B:EU/ENA
11595	GREECE RS MAKEDONIAS Thessaloniki	35kW:DS:EU Su:35kW:DS:EU
11600	CHINA (PR) RADIO BEIJING	SAS/EAF
11605	ISRAEL RASHUTH HASHIDUR Tel Aviv	(D):50kW:DS-B:EU/ENA (J):300kW:DS-B:EU/NAF/CA (J)Su-F:300kW:DS-B:EU/NAF/CA
11610	CHINA (PR) CENTRAL PEOPLES BS	DS-1 W-M::DS-1
	RADIO BEIJING	WUSSR
	ISRAEL KOL ISRAEL Tel Aviv	(J):300kW::EU/NAF/CA (J):300kW::WUSSR/EEU (J):300kW::EU/ENA (D)Su-F:300kW::WUSSR/EEU
11615	GREECE FONI TIS HELLADAS Athens	(J):100kW::AF (J):100kW::ME W/M:100kW::AF
11620	INDIA ALL INDIA RADIO Aligarh	250kW::ME 250kW::EU
(con'd)	ALL INDIA RADIO Delhi	50kW::SAS

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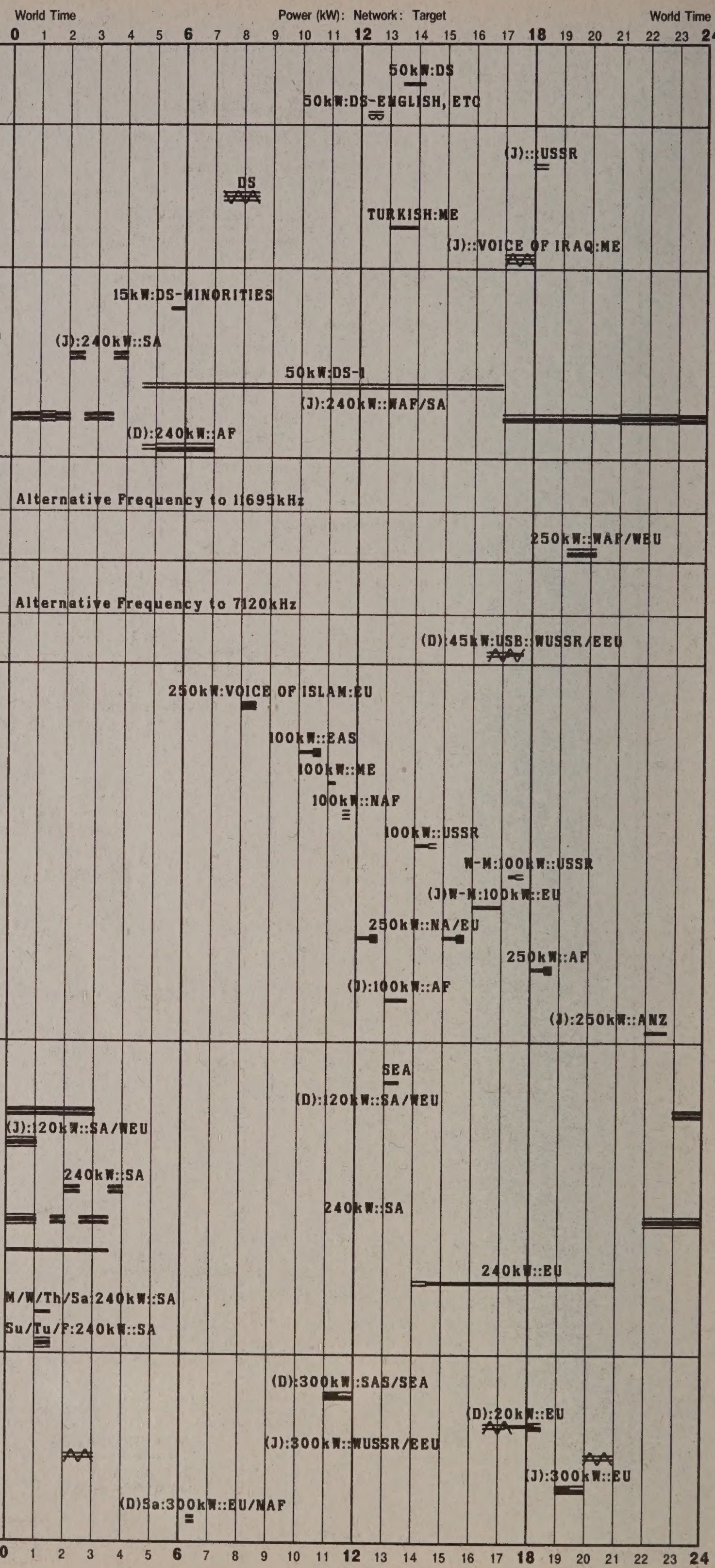
Frequency (kHz)	Country / Station / Location	World Time — Power (kW): Network: Target
11620 (con'd)	INDIA ALL INDIA RADIO Delhi	50kW:DS 50kW:DS-ENGLISH, ETC
11625	SYRIA SYRIAN BC SERVICE Adhra	(J)::USSR DS TURKISH:ME (J)::VOICE OF IRAQ:ME
11630	CHINA (PR) CENTRAL PEOPLES BS Beijing USSR "RADIO MAGALLANES" Via Radio Moscow RADIO MOSCOW Serpukhov RADIO MOSCOW/RP&P Moscow +RADIO MOSCOW/RP&P Moscow	15kW:DS-MINORITIES (J):240kW::SA 50kW:DS-I (J):240kW::WAF/SA (D):240kW::AF
11635	MONACO TRANS WORLD RADIO Monte Carlo	Alternative Frequency to 11695kHz
11635v	PAKISTAN RADIO PAKISTAN Islamabad	250kW::WAF/WEU
11639	SOMALIA RADIO HARGEISA Hargeisa	Alternative Frequency to 7120kHz
11640	ISRAEL KOL ISRAEL Tel Aviv	(D):45kW:USB::WUSSR/EEU
11645	BANGLADESH RADIO BANGLADESH Dhaka GREECE FONI TIS HELLADAS Athens FONI TIS HELLADAS Kaválla	250kW:VOICE OF ISLAM:EU 100kW::EAS 100kW::ME 100kW::NAF 100kW::USSR W-M:100kW::USSR (J)W-M:100kW::EU 250kW::NA/EU 250kW::AF (J):100kW::AF (J):250kW::ANZ
11650	CHINA (PR) RADIO BEIJING RADIO BEIJING Xi'an +RADIO BEIJING Xi'an USSR "RADIO MAGALLANES" Via Radio Moscow RADIO MOSCOW/RP&P Moscow	SEA (D):120kW::SA/WEU (J):120kW::SA/WEU 240kW::SA 240kW::SA 240kW::EU M/W/Th/Sa:240kW::SA Su/Tu/F:240kW::SA
11655 (con'd)	ISRAEL KOL ISRAEL Tel Aviv	(D):300kW::SAS/SEA (D):20kW::EU (J):300kW::WUSSR/EEU (J):300kW::EU (D)Sa:300kW::EU/NAF



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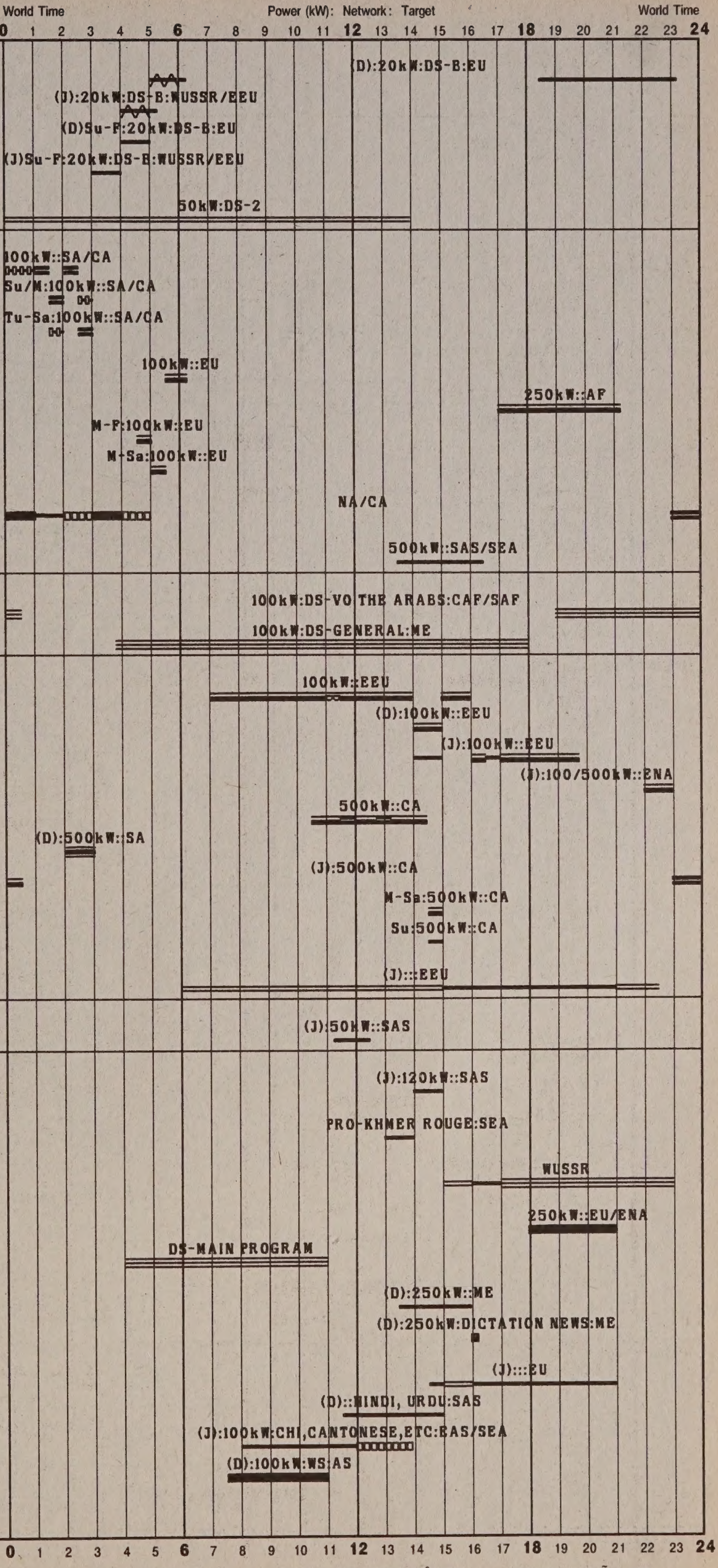
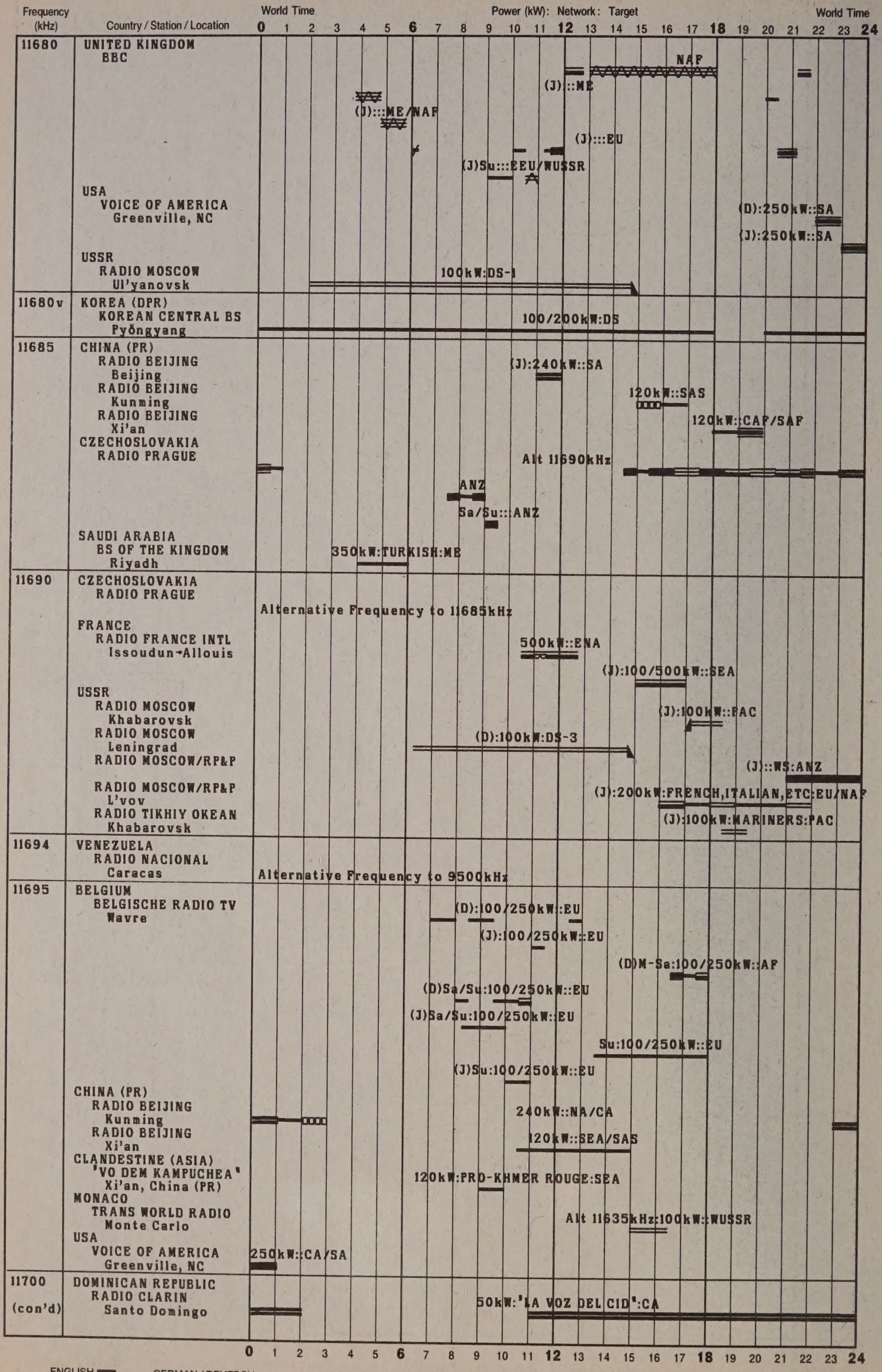
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11655 (con'd)	ISRAEL RASHUTH HASHIDUR Tel Aviv	(D):20kW:DS-B:EU (J):20kW:DS-B:WUSSR/EEU (D)Su-F:20kW:DS-B:EU (J)Su-F:20kW:DS-B:WUSSR/EEU
	USSR RADIO MOSCOW Alma-Ata	50kW:DS-2
11660	AUSTRIA RADIO AUSTRIA INTL Vienna	100kW::SA/CA Su/M:100kW::SA/CA Tu-Sa:100kW::SA/CA
	BELGIUM RT BELGE FRANCAISE Wavre	100kW::EU 250kW::AF M-F:100kW::EU M-Sa:100kW::EU
	CHINA (PR) RADIO BEIJING	NA/CA
	USSR RADIO MOSCOW/RP&P Taldom	500kW::SAS/SEA
11665	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-VO THE ARABS:CAF/SAF 100kW:DS-GENERAL:ME
11670	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EEU (D):100kW::EEU (J):100kW::EEU (J):100/500kW::ENA
	RADIO FRANCE INTL Via French Guiana	500kW::CA (D):500kW::SA (J):500kW::CA M-Sa:500kW::CA Su:500kW::CA
	USSR RADIO MOSCOW/RP&P	(J):::EEU
11672v	PAKISTAN RADIO PAKISTAN Karachi	(J):50kW::SAS
11675	CHINA (PR) RADIO BEIJING Xi'an	(J):120kW::SAS
	CLANDESTINE (ASIA) "VO DEM KAMPUCHEA" China (PR)	PRO-KHMER ROUGE:SEA
	IRAQ RADIO BAGHDAD	WUSSR
	KUWAIT RADIO KUWAIT Jadādiyah	250kW::EU/ENA DS-MAIN PROGRAM
	PAKISTAN +RADIO PAKISTAN Islamabad	(D):250kW::ME
	+RADIO PAKISTAN Islamabad	(D):250kW:DICTATION NEWS:ME
	USSR RADIO MOSCOW/RP&P	(J):::EU (D)::HINDI, URDU:SAS
	RADIO MOSCOW/RP&P Vladivostok	(J):100kW:CHI,CANTONESE,ETC:EAS/SEA (D):100kW:WS:AS



ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ═

ARABIC / عربى ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11680	UNITED KINGDOM BBC	NAF (J):::ME (J):::ME/NAF (J):::EU (J)Su:::EEU/WUSSR
	USA VOICE OF AMERICA Greenville, NC	(D):250kW::SA (J):250kW::SA
	USSR RADIO MOSCOW Ul'yanovsk	100kW:DS-1
11680v	KOREA (DPR) KOREAN CENTRAL BS Pyŏngyang	100/200kW:DS
11685	CHINA (PR) RADIO BEIJING Beijing	(J):240kW::SA
	RADIO BEIJING Kunming	120kW::SAS
	RADIO BEIJING Xi'an	120kW::CAF/SAF
	CZECHOSLOVAKIA RADIO PRAGUE	Alt 11690kHz ANZ Sa/Su:::ANZ
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:TURKISH:ME
11690	CZECHOSLOVAKIA RADIO PRAGUE	Alternative Frequency to 11685kHz
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	500kW::ENA (J):100/500kW::SEA
	USSR RADIO MOSCOW Khabarovsk	(J):100kW::PAC
	RADIO MOSCOW Leningrad	(D):100kW:DS-3
	RADIO MOSCOW/RP&P	(J)::WS:ANZ
	RADIO MOSCOW/RP&P L'vov	(J):200kW:FRENCH,ITALIAN,ETC:EU/NAF
	RADIO TIKHIY OKEAN Khabarovsk	(J):100kW:MARINERS:PAC
11694	VENEZUELA RADIO NACIONAL Caracas	Alternative Frequency to 9500kHz
11695	BELGIUM BELGISCHE RADIO TV Wavre	(D):100/250kW::EU (J):100/250kW::EU (D)M-Sa:100/250kW::AF (D)Sa/Su:100/250kW::EU (J)Sa/Su:100/250kW::EU Su:100/250kW::EU (J)Su:100/250kW::EU
	CHINA (PR) RADIO BEIJING Kunming	240kW::NA/CA
	RADIO BEIJING Xi'an	120kW::SEA/SAS
	CLANDESTINE (ASIA) "VO DEM KAMPUCHEA" Xi'an, China (PR)	120kW:PRO-KHMER ROUGE:SEA
	MONACO TRANS WORLD RADIO Monte Carlo	Alt 11635kHz:100kW::WUSSR
	USA VOICE OF AMERICA Greenville, NC	250kW::CA/SA
11700 (con'd)	DOMINICAN REPUBLIC RADIO CLARIN Santo Domingo	50kW:"LA VOZ DEL CID":CA

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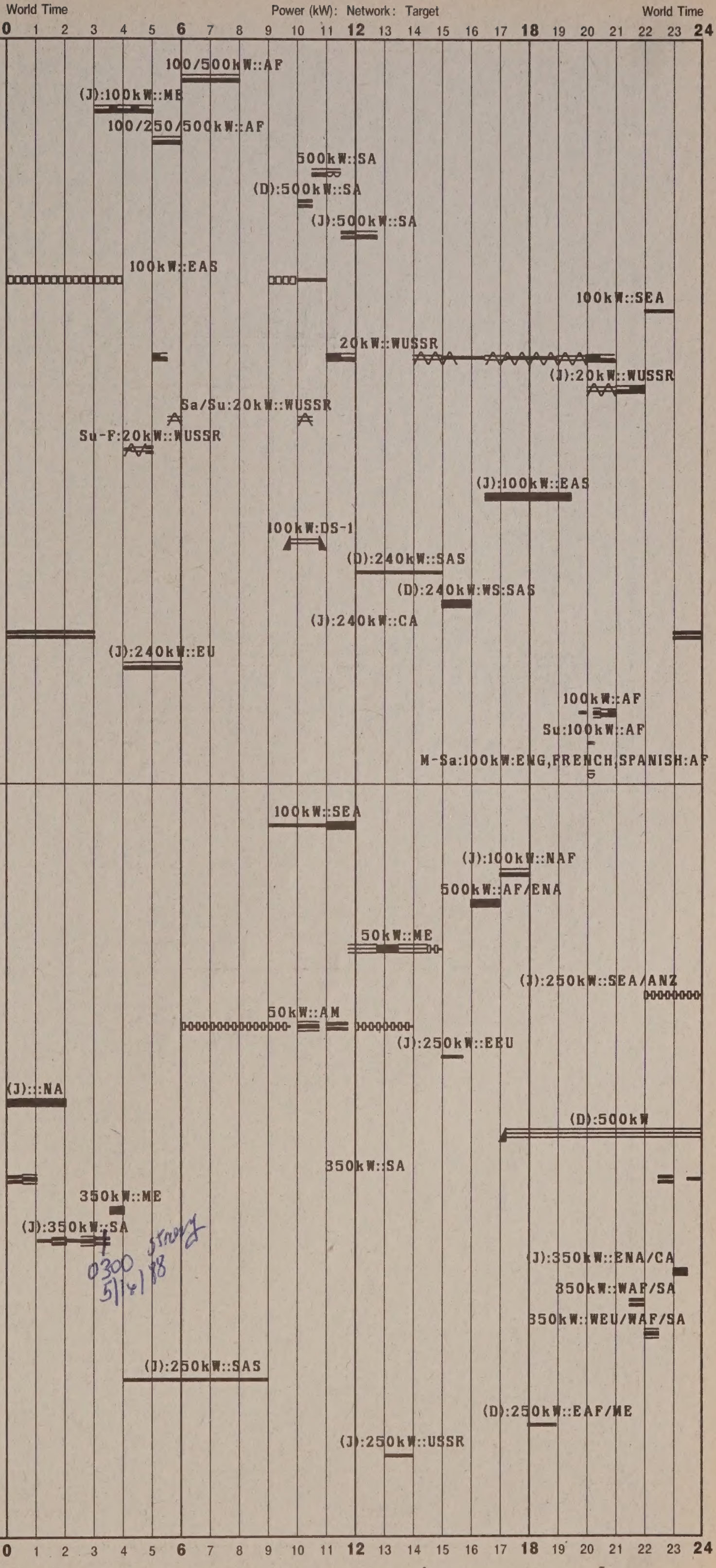
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11700 (con'd)	**FRANCE** RADIO FRANCE INTL Issoudun-Allouis	100/500kW::AF (J):100kW::ME
	RADIO FRANCE INTL Multiple Locations	100/250/500kW::AF
	RADIO FRANCE INTL Via French Guiana	500kW::SA (D):500kW::SA (J):500kW::SA
	GUAM ADVENTIST WORLD R Agat	100kW::EAS 100kW::SEA
	ISRAEL KOL ISRAEL Tel Aviv	20kW::WUSSR (J):20kW::WUSSR Sa/Su:20kW::WUSSR Su-F:20kW::WUSSR
	USA KNLS-NEW LIFE STN Anchor Pt, Alaska	(J):100kW::EAS
	USSR +RADIO MOSCOW Ul'yanovsk	100kW:DS-1
	+RADIO MOSCOW/RP&P Krasnodar	(D):240kW::SAS
	+RADIO MOSCOW/RP&P Krasnodar	(D):240kW:WS:SAS
	RADIO MOSCOW/RP&P L'vov	(J):240kW::CA (J):240kW::EU
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::AF Su:100kW::AF M-Sa:100kW:ENG,FRENCH,SPANISH:AF
11705	**AUSTRALIA** RADIO AUSTRALIA Carnarvon	100kW::SEA
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(J):100kW::NAF
	RADIO FRANCE INTL Multiple Locations	500kW::AF/ENA
	GERMANY (DR) RADIO BERLIN INTL Nauen	50kW::ME
	GERMANY (FR) DEUTSCHE WELLE Via Kigali, Rwanda	(J):250kW::SEA/ANZ
	DEUTSCHE WELLE Via Montserrat	50kW::AM
	DEUTSCHE WELLE Via Sines, Portugal	(J):250kW::EEU
	IRAQ RADIO BAGHDAD	(J):::NA
	RADIO BAGHDAD Balad-Salah el Deen	(D):500kW
	SWEDEN RADIO SWEDEN INTL Hörby	350kW::SA 350kW::ME (J):350kW::SA 0300 strong 5/14/88 (J):350kW::ENA/CA
	RADIO SWEDEN INTL Karlsborg	350kW::WAF/SA 350kW::WEU/WAF/SA
	TURKEY TURKISH RTV CORP Ankara	(J):250kW::SAS
	USA VOICE OF AMERICA Via Kavála, Greece	(D):250kW::EAF/ME (J):250kW::USSR
(con'd)		



ENGLISH ▬ GERMAN / DEUTSCH ▭▭▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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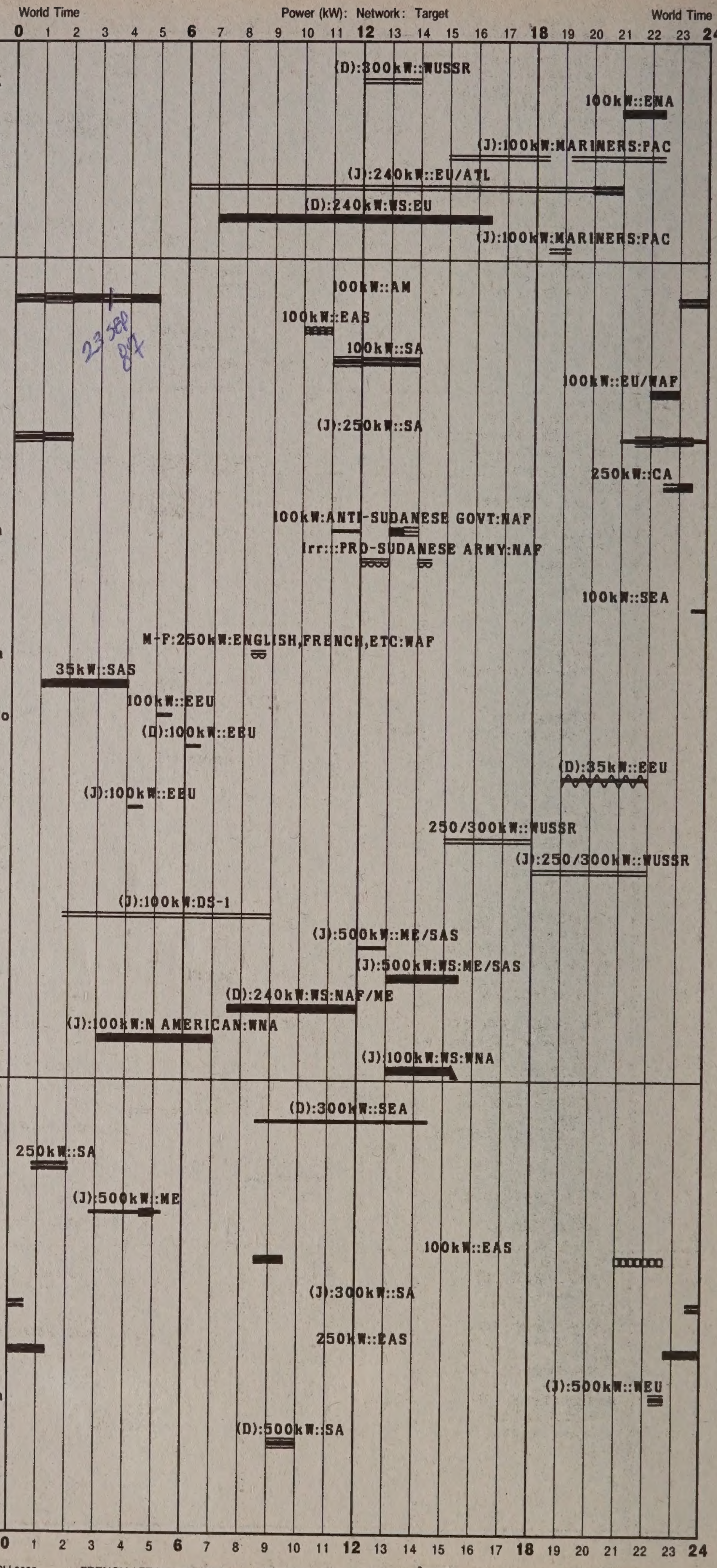
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11705 (con'd)	USA	
	VOICE OF AMERICA Via Woofferton, UK	(D):300kW::WUSSR
	WRNO WORLDWIDE New Orleans, La	100kW::ENA
	USSR	
	RADIO MOSCOW Khabarovsk	(J):100kW:MARINERS:PAC
	RADIO MOSCOW/RP&P Serpukhov	(J):240kW::EU/ATL
	+RADIO MOSCOW/RP&P Serpukhov	(D):240kW:WS:EU
	RADIO TIKHIY OKEAN Khabarovsk	(J):100kW:MARINERS:PAC
11710	ARGENTINA	
	R ARGENTINA-RAE Buenos Aires	100kW::AM 100kW::EAS 100kW::SA 100kW::EU/WAF
	BULGARIA	
	RADIO SOFIA Rebrovo-Sofia	(J):250kW::SA
	CANADA	
	RADIO CANADA INTL Sackville, NB	250kW::CA
	CLANDESTINE (AFRICA)	
	"RADIO SPLA" Bantu Liben, Ethi'a	100kW:ANTI-SUDANESE GOVT:NAF
	"SUDAN PEOPLE AFP" Sudan	Irr::PRO-SUDANESE ARMY:NAF
	PHILIPPINES	
	RADIO VERITAS ASIA Malolos	100kW::SEA
	USA	
	VOICE OF AMERICA Via M'rovia, Liberia	M-F:250kW:ENGLISH,FRENCH,ETC:WAF
	VOICE OF AMERICA Via Sri Lanka	35kW::SAS
	VOICE OF AMERICA Via Tangier,Morocco	100kW::EEU (D):100kW::EEU (D):35kW::EEU (J):100kW::EEU
	VOICE OF AMERICA Via Woofferton, UK	250/300kW::WUSSR (J):250/300kW::WUSSR
	USSR	
	RADIO MOSCOW Moscow	(J):100kW:DS-1
	RADIO MOSCOW/RP&P Armavir	(J):500kW::ME/SAS (J):500kW:WS:ME/SAS
	+RADIO MOSCOW/RP&P Moscow	(D):240kW:WS:NAF/ME
	RADIO MOSCOW/RP&P Petropavlovsk-Kam	(J):100kW:N AMERICAN:WNA (J):100kW:WS:WNA
11715	CHINA (PR)	
	RADIO BEIJING Xi'an	(D):300kW::SEA
	EGYPT	
	RADIO CAIRO Kafr Silim-Abis	250kW::SA
	FINLAND	
	RADIO FINLAND Pori	(J):500kW::ME
	GUAM	
	KTWR-TRANS WORLD R Merizo	100kW::EAS
	HOLLAND	
	RADIO NEDERLAND Via Neth Antilles	(J):300kW::SA
	INDIA	
	ALL INDIA RADIO Aligarh	250kW::EAS
	UNITED KINGDOM	
	BBC Holywell-Rampisham	(J):500kW::WEU
	USA	
(con'd)	VOICE OF AMERICA Greenville, NC	(D):500kW::SA



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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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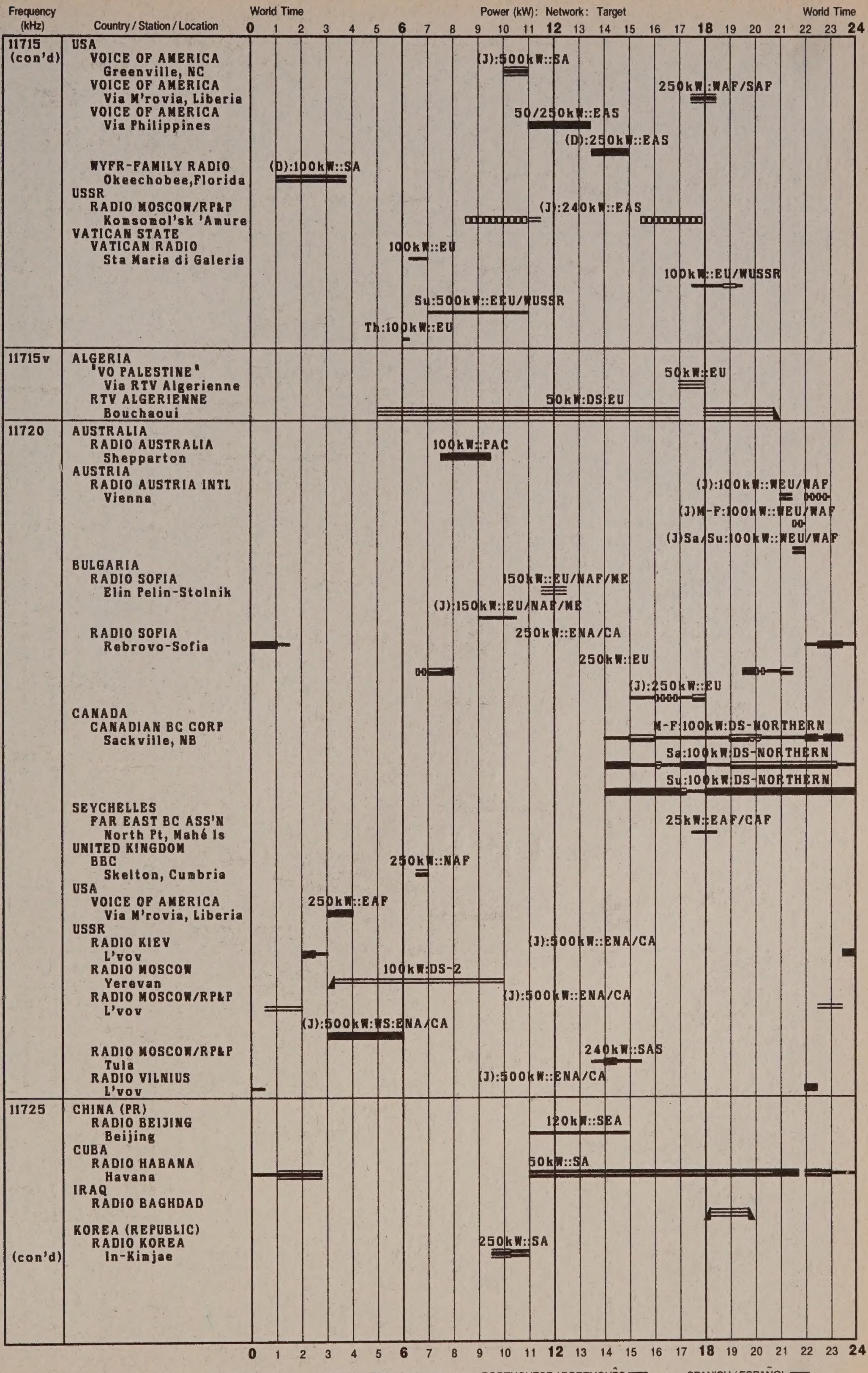

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11715 (con'd)	USA	
	VOICE OF AMERICA Greenville, NC	(J):500kW::SA
	VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/SAF
	VOICE OF AMERICA Via Philippines	50/250kW::EAS (D):250kW::EAS
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::SA
	USSR	
	RADIO MOSCOW/RP&P Komsomol'sk 'Amure	(J):240kW::EAS
	VATICAN STATE	
	VATICAN RADIO Sta Maria di Galeria	100kW::EU 100kW::EU/WUSSR Su:500kW::EEU/WUSSR Th:100kW::EU
11715v	ALGERIA	
	'VO PALESTINE' Via RTV Algerienne	50kW::EU
	RTV ALGERIENNE Bouchaoui	50kW:DS:EU
11720	AUSTRALIA	
	RADIO AUSTRALIA Shepparton	100kW::PAC
	AUSTRIA	
	RADIO AUSTRIA INTL Vienna	(J):100kW::WEU/WAF (J)M-F:100kW::WEU/WAF (J)Sa/Su:100kW::WEU/WAF
	BULGARIA	
	RADIO SOFIA Elin Pelin-Stolnik	150kW::EU/NAF/ME (J):150kW::EU/NAF/ME
	RADIO SOFIA Rebrovo-Sofia	250kW::ENA/CA 250kW::EU (J):250kW::EU
	CANADA	
	CANADIAN BC CORP Sackville, NB	M-F:100kW:DS-NORTHERN Sa:100kW:DS-NORTHERN Su:100kW:DS-NORTHERN
	SEYCHELLES	
	FAR EAST BC ASS'N North Pt, Mahé Is	25kW::EAF/CAF
	UNITED KINGDOM	
	BBC Skelton, Cumbria	250kW::NAF
	USA	
	VOICE OF AMERICA Via M'rovia, Liberia	250kW::EAF
	USSR	
	RADIO KIEV L'vov	(J):500kW::ENA/CA
	RADIO MOSCOW Yerevan	100kW:DS-2
	RADIO MOSCOW/RP&P L'vov	(J):500kW::ENA/CA (J):500kW:WS:ENA/CA
	RADIO MOSCOW/RP&P Tula	240kW::SAS
	RADIO VILNIUS L'vov	(J):500kW::ENA/CA
11725	CHINA (PR)	
	RADIO BEIJING Beijing	120kW::SEA
	CUBA	
	RADIO HABANA Havana	50kW::SA
	IRAQ	
	RADIO BAGHDAD	
	KOREA (REPUBLIC)	
(con'd)	RADIO KOREA In-Kimjae	250kW::SA

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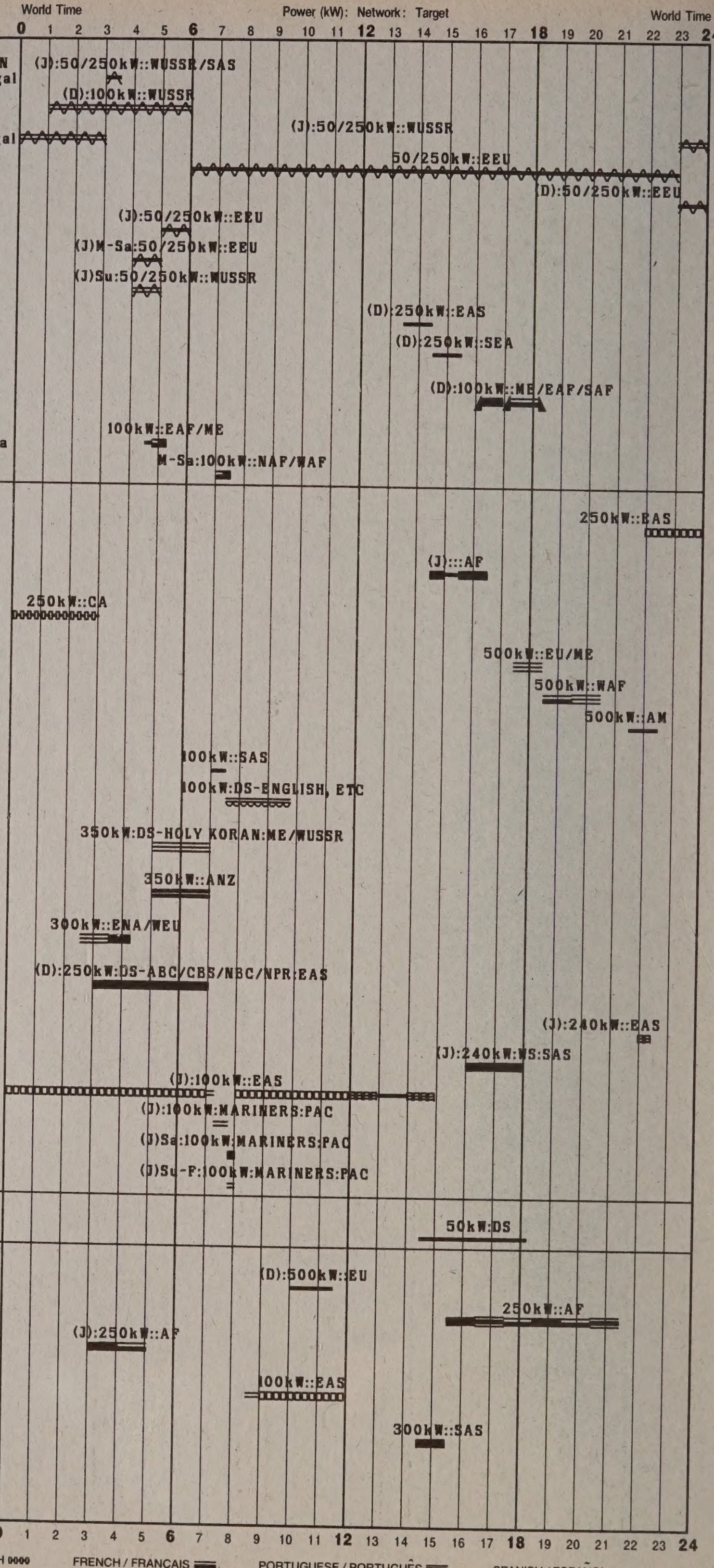

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11725 (con'd)	USA	
	R FREE AFGHANISTAN Via Lisbon, Portugal	(J):50/250kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	(D):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR 50/250kW::EEU (D):50/250kW::EEU (J):50/250kW::EEU (J)M-Sa:50/250kW::EEU (J)Su:50/250kW::WUSSR
	VOICE OF AMERICA Via Philippines	(D):250kW::EAS (D):250kW::SEA
	USSR	
	RADIO MOSCOW/RP&P Kazan'	(D):100kW::ME/EAF/SAF
	VATICAN STATE	
	VATICAN RADIO Sta Maria di Galeria	100kW::EAF/ME M-Sa:100kW::NAF/WAF
11730	AUSTRALIA	
	RADIO AUSTRALIA Darwin	250kW::EAS
	CZECHOSLOVAKIA	
	RADIO PRAGUE	(J):::AF
	GERMANY (FR)	
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::CA
	HOLLAND	
	RADIO NEDERLAND Flevoland	500kW::EU/ME 500kW::WAF 500kW::AM
	INDIA	
	ALL INDIA RADIO Delhi	100kW::SAS 100kW:DS-ENGLISH, ETC
	SAUDI ARABIA	
	BS OF THE KINGDOM Riyadh	350kW:DS-HOLY KORAN:ME/WUSSR
	SPAIN	
	R EXTERIOR ESPANA Noblejas	350kW::ANZ
	UNITED ARAB EMIRATES	
	UAE RADIO Dubai	300kW::ENA/WEU
	USA	
	AFRTS-US MILITARY Delano, California	(D):250kW:DS-ABC/CBS/NBC/NPR:EAS
	USSR	
	RADIO MOSCOW/RP&P Chita	(J):240kW::EAS (J):240kW:WS:SAS
	RADIO MOSCOW/RP&P Khabarovsk	(J):100kW::EAS
	RADIO TIKHIY OKEAN Khabarovsk	(J):100kW:MARINERS:PAC (J)Sa:100kW:MARINERS:PAC (J)Su-F:100kW:MARINERS:PAC
11734.4	TANZANIA	
	RADIO TANZANIA Bububu, Zanzibar	50kW:DS
11735	BULGARIA	
	RADIO SOFIA Plovdiv	(D):500kW::EU
	RADIO SOFIA Rebrovo-Sofia	250kW::AF (J):250kW::AF
	GUAM	
	KTWR-TRANS WORLD R Merizo	100kW::EAS
	HOLLAND	
(con'd)	RADIO NEDERLAND Via Madagascar	300kW::SAS

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ARABIC / عربي ☰ RUSSIAN / PYCCKИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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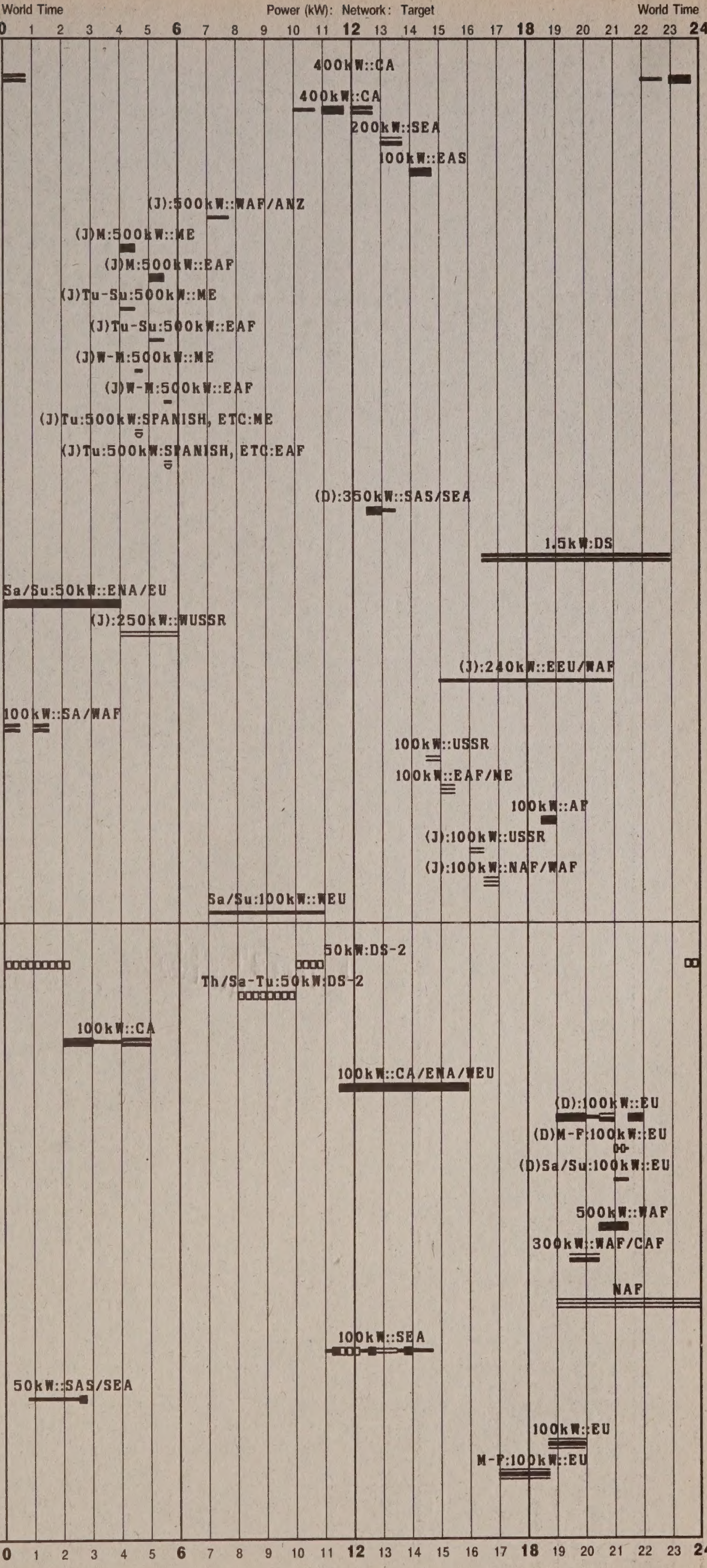
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11735 (con'd)	KOREA (DPR) RADIO PYONGYANG Kujang-dong	400kW::CA
	RADIO PYONGYANG Pyŏngyang	400kW::CA
		200kW::SEA
		100kW::EAS
	NORWAY RADIO NORWAY INTL Kvitsøy	(J):500kW::WAF/ANZ
		(J)M:500kW::ME
		(J)M:500kW::EAF
		(J)Tu-Su:500kW::ME
		(J)Tu-Su:500kW::EAF
		(J)W-M:500kW::ME
		(J)W-M:500kW::EAF
		(J)Tu:500kW:SPANISH, ETC:ME
		(J)Tu:500kW:SPANISH, ETC:EAF
	SWEDEN RADIO SWEDEN INTL Hörby	(D):350kW::SAS/SEA
	URUGUAY RADIO MONTE CARLO Montevideo	1.5kW:DS
	USA KCBI Dallas, Texas	Sa/Su:50kW::ENA/EU
	KGEI-VO FRIENDSHIP Redwood City, Ca	(J):250kW::WUSSR
	USSR RADIO MOSCOW/RP&P Serpukhov	(J):240kW::EEU/WAF
	YUGOSLAVIA RADIO YUGOSLAVIA Belgrade	100kW::SA/WAF
		100kW::USSR
		100kW::EAF/ME
		100kW::AF
		(J):100kW::USSR
		(J):100kW::NAF/WAF
	VARIOUS LOCAL STNS Belgrade	Sa/Su:100kW::WEU
11740	CHINA (PR) CENTRAL PEOPLES BS Beijing	50kW:DS-2
		Th/Sa-Tu:50kW:DS-2
	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	100kW::CA
	ECUADOR HCJB-VO THE ANDES Quito	100kW::CA/ENA/WEU
		(D):100kW::EU
		(D)M-F:100kW::EU
		(D)Sa/Su:100kW::EU
	HOLLAND RADIO NEDERLAND Flevoland	500kW::WAF
	RADIO NEDERLAND Via Madagascar	300kW::WAF/CAF
	IRAQ RADIO BAGHDAD	NAF
	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	100kW::SEA
	PAKISTAN RADIO PAKISTAN Karachi	50kW::SAS/SEA
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	100kW::EU
(con'd)		M-F:100kW::EU



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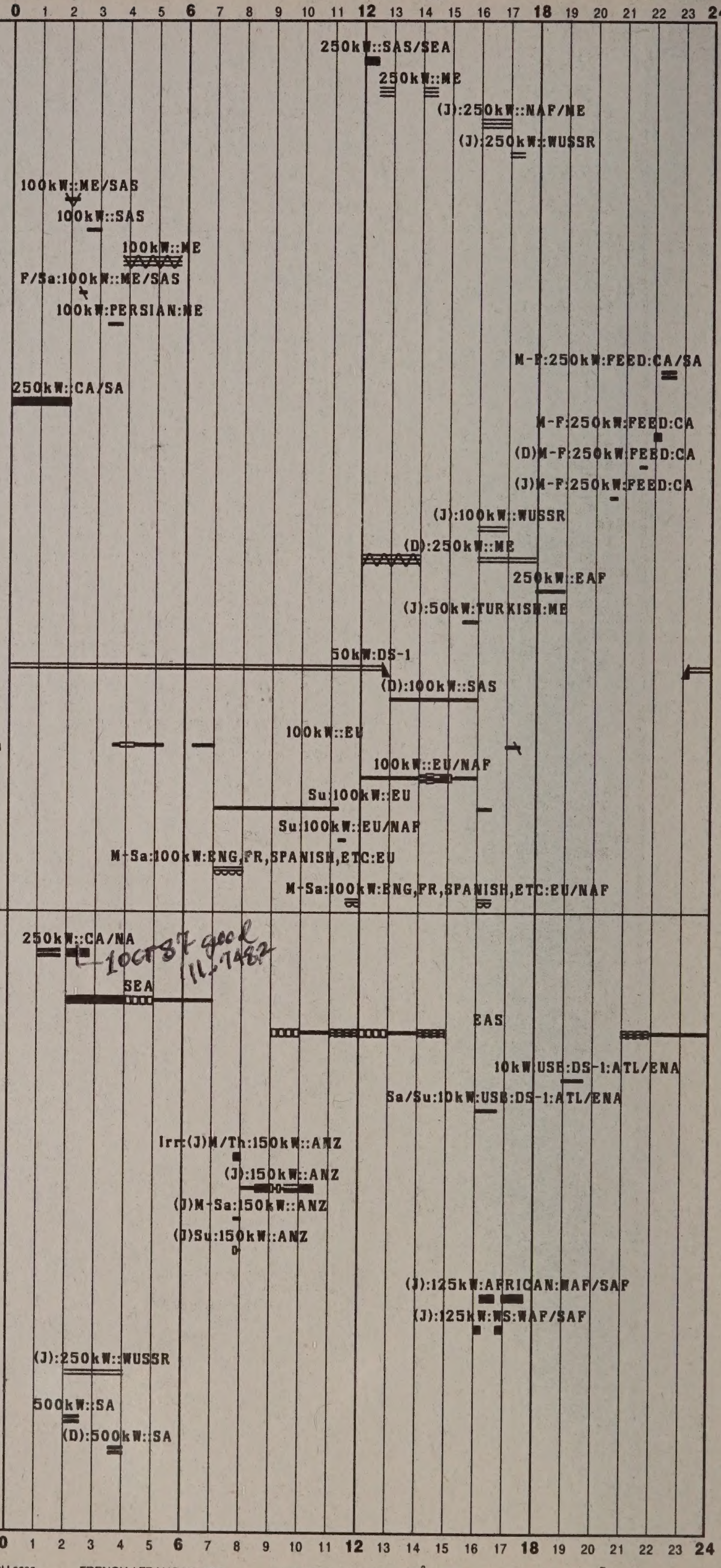

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11740 (con'd)	**ROMANIA** RADIO BUCHAREST Bucharest	250kW::SAS/SEA 250kW::ME (J):250kW::NAF/ME (J):250kW::WUSSR
	UNITED KINGDOM BBC Via Maşirah, Oman	100kW::ME/SAS 100kW::SAS 100kW::ME F/Sa:100kW::ME/SAS 100kW:PERSIAN:ME
	USA VOICE OF AMERICA Cincinnati, Ohio	M-F:250kW:FEED:CA/SA
	VOICE OF AMERICA Delano, California	250kW::CA/SA
	VOICE OF AMERICA Greenville, NC	M-F:250kW:FEED:CA (D)M-F:250kW:FEED:CA (J)M-F:250kW:FEED:CA
	VOICE OF AMERICA Via Ismaning, GFR	(J):100kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::ME
	VOICE OF AMERICA Via Philippines	250kW::EAF
	VOICE OF AMERICA Via Rhodes, Greece	(J):50kW:TURKISH:ME
	USSR RADIO MOSCOW Novosibirsk	50kW:DS-1
	RADIO MOSCOW/RP&P Tashkent	(D):100kW::SAS
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EU 100kW::EU/NAF Su:100kW::EU Su:100kW::EU/NAF M-Sa:100kW:ENG,FR,SPANISH,ETC:EU M-Sa:100kW:ENG,FR,SPANISH,ETC:EU/NAF
11745	**BRAZIL** RADIO NACIONAL Brasília	250kW::CA/NA
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	SEA EAS
	ICELAND RIKISUTVARPID Reykjavik	10kW:USB:DS-1:ATL/ENA Sa/Su:10kW:USB:DS-1:ATL/ENA
	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:(J)M/Th:150kW::ANZ
	SWISS RADIO INTL Schwarzenburg	(J):150kW::ANZ (J)M-Sa:150kW::ANZ (J)Su:150kW::ANZ
	UNITED KINGDOM BBC Via Ascension	(J):125kW:AFRICAN:WAF/SAF (J):125kW:WS:WAF/SAF
	USA KGEI-VO FRIENDSHIP Redwood City, Ca	(J):250kW::WUSSR
(con'd)	**USSR** "RADIO MAGALLANES" Via Radio Moscow	500kW::SA (D):500kW::SA

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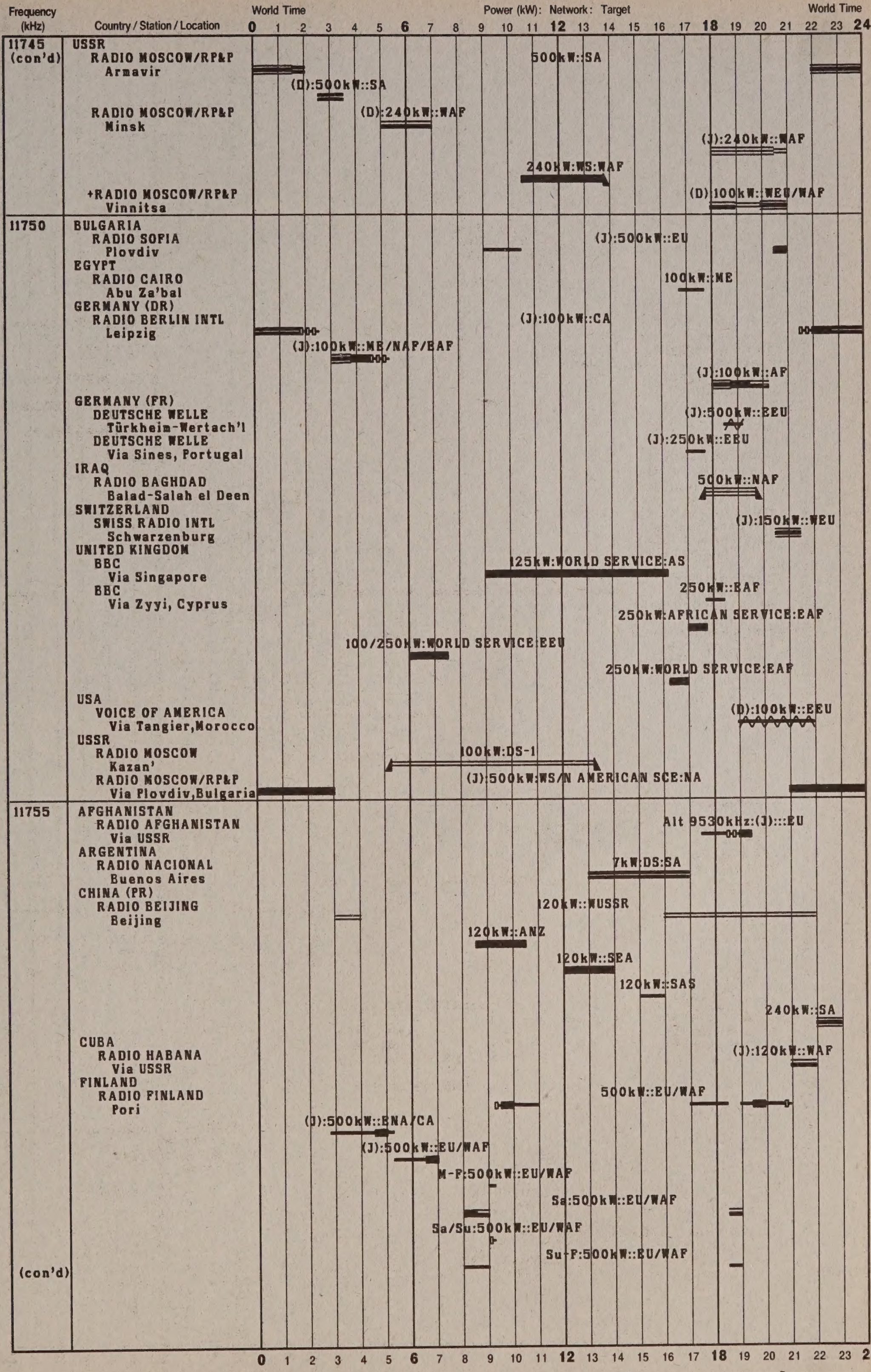

11745 (con'd)

USSR
RADIO MOSCOW/RP&P
Armavir
500kW::SA
(D):500kW::SA
RADIO MOSCOW/RP&P
Minsk
(D):240kW::WAF
(J):240kW::WAF
240kW:WS:WAF
+RADIO MOSCOW/RP&P
Vinnitsa
(D):100kW::WEU/WAF

11750

BULGARIA
RADIO SOFIA
Plovdiv
(J):500kW::EU
EGYPT
RADIO CAIRO
Abu Za'bal
100kW::ME
GERMANY (DR)
RADIO BERLIN INTL
Leipzig
(J):100kW::CA
(J):100kW::ME/NAF/EAF
(J):100kW::AF
GERMANY (FR)
DEUTSCHE WELLE
Türkheim-Wertach'l
(J):500kW::EEU
DEUTSCHE WELLE
Via Sines, Portugal
(J):250kW::EEU
IRAQ
RADIO BAGHDAD
Balad-Salah el Deen
500kW::NAF
SWITZERLAND
SWISS RADIO INTL
Schwarzenburg
(J):150kW::WEU
UNITED KINGDOM
BBC
Via Singapore
125kW:WORLD SERVICE:AS
BBC
Via Zyyi, Cyprus
250kW::EAF
250kW:AFRICAN SERVICE:EAF
100/250kW:WORLD SERVICE:EEU
250kW:WORLD SERVICE:EAF
USA
VOICE OF AMERICA
Via Tangier,Morocco
(D):100kW::EEU
USSR
RADIO MOSCOW
Kazan'
100kW:DS-1
RADIO MOSCOW/RP&P
Via Plovdiv,Bulgaria
(J):500kW:WS/N AMERICAN SCE:NA

11755

AFGHANISTAN
RADIO AFGHANISTAN
Via USSR
Alt 9530kHz:(J):::EU
ARGENTINA
RADIO NACIONAL
Buenos Aires
7kW:DS:SA
CHINA (PR)
RADIO BEIJING
Beijing
120kW::WUSSR
120kW::ANZ
120kW::SEA
120kW::SAS
240kW::SA
CUBA
RADIO HABANA
Via USSR
(J):120kW::WAF
FINLAND
RADIO FINLAND
Pori
500kW::EU/WAF
(J):500kW::ENA/CA
(J):500kW::EU/WAF
M-F:500kW::EU/WAF
Sa:500kW::EU/WAF
Sa/Su:500kW::EU/WAF
Su-F:500kW::EU/WAF

(con'd)

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ▤ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ▤
ARABIC / عربي ≡ RUSSIAN / РУССКИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▤ MULTILINGUAL ▤ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11755 (con'd)	PHILIPPINES RADIO VERITAS ASIA Palauig	250kW::AS
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::EAF/ME/NAF F:80kW::EAF/ME/NAF Su/F:80kW::EAF/ME/NAF
	USSR RADIO MOSCOW Tbilisi	(J):240kW:MARINERS:ME/SAS
	RADIO MOSCOW/RP&P Leningrad	240kW::ME
	RADIO MOSCOW/RP&P Tula	(J):100kW::EAF (J):100kW:WS:EAF
	RADIO MOSCOW/RP&P Vladivostok	(J):100kW:WS:WNA
11760	AUSTRIA RADIO AUSTRIA INTL Vienna	(J):500kW::SAS/SEA
	CUBA RADIO HABANA Havana	250kW::SA 500kW::ENA
	IRAQ RADIO BAGHDAD Balad-Salah el Deen	500kW:DS:NAF
	USA VOICE OF AMERICA Greenville, NC	(D):250kW::EU
	VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::WUSSR
	VOICE OF AMERICA Via M'rovia, Liberia	M-F:250kW::WAF/CAF
	VOICE OF AMERICA Via Philippines	250kW::SEA
	VOICE OF AMERICA Via Rhodes, Greece	(D):50kW:TURKISH:ME
	VOICE OF AMERICA Via Tangier,Morocco	100kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(J):250/300kW::WUSSR (J):250/300kW:ENG,GREEK,TURKISH:EU/M
	USSR RADIO MOSCOW/RP&P Khar'kov	100kW:DS-1
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::NAF/WAF
11761v	COOK ISLANDS RADIO COOK ISLANDS Rarotonga Is	1kW:DS-ENGLISH, ETC
11765	AUSTRALIA RADIO AUSTRALIA Carnarvon	300kW::EAS/SEA
	BRAZIL RADIO NACIONAL Brasília	250kW::EU/WAF
	BULGARIA BULGARIAN RADIO Rebrovo-Sofia	250kW:DS-1:EU/NAF/ATL
	RADIO SOFIA Rebrovo-Sofia	(D):250kW::WAF (J):250kW::SA
	CHINA (PR) RADIO BEIJING Beijing	120kW::SEA
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::WAF 100kW::USSR
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::SA/WAF (J):500kW::CAF/EAF
	DEUTSCHE WELLE Via Sri Lanka	250kW::CAF/SAF
	INDIA ALL INDIA RADIO Delhi	100kW::SEA
(con'd)	USSR RADIO MOSCOW/RP&P Alma-Ata	(J):100kW:VIETNAMESE, ETC:SEA

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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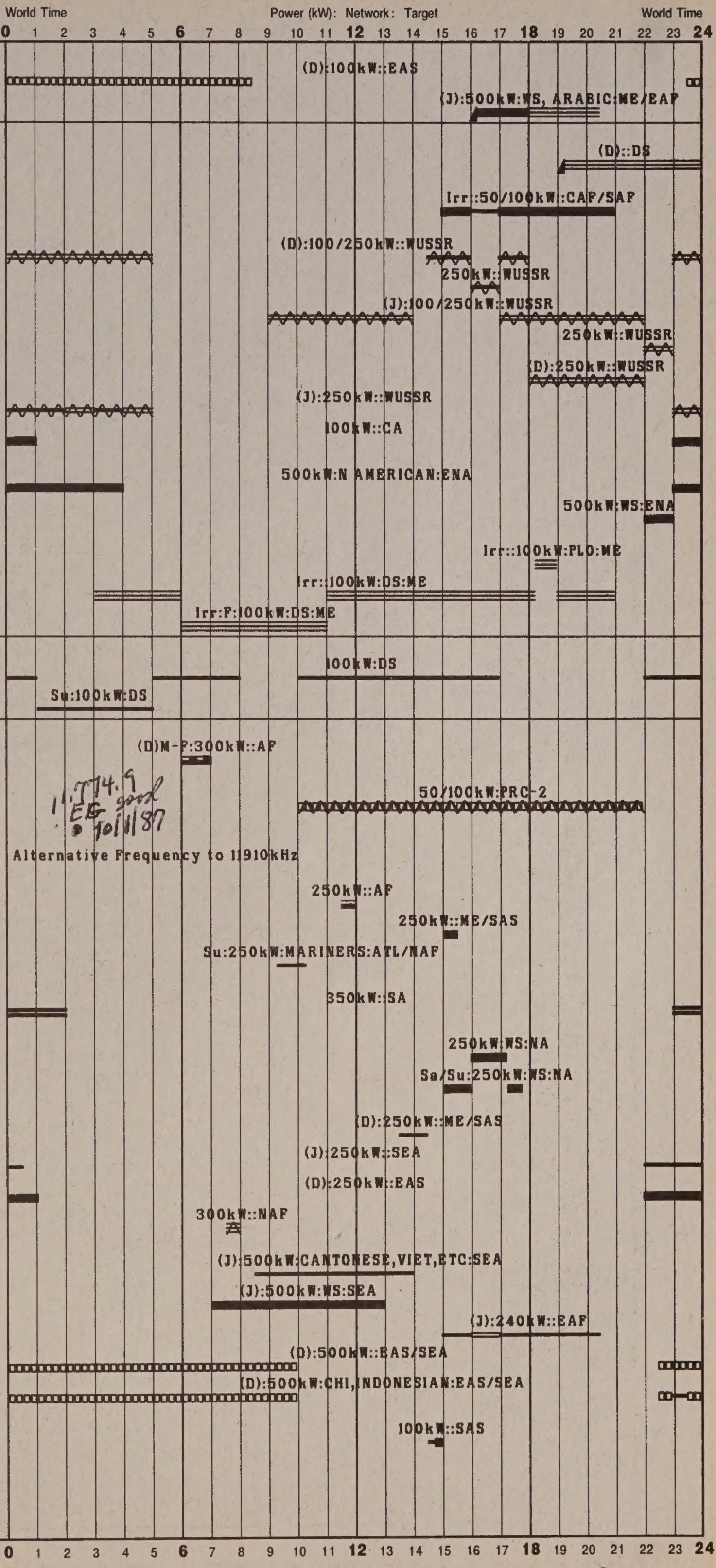
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11765 (con'd)	USSR RADIO MOSCOW/RP&P Irkutsk	(D):100kW::EAS
	RADIO MOSCOW/RP&P Kenga	(J):500kW:WS, ARABIC:ME/EAF
11770	IRAQ RADIO BAGHDAD	(D)::DS
	NIGERIA VOICE OF NIGERIA Ikorodu	Irr::50/100kW::CAF/SAF
	USA RFE-RL Via Germany (FR)	(D):100/250kW::WUSSR 250kW::WUSSR (J):100/250kW::WUSSR
	RFE-RL Via Pals, Spain	250kW::WUSSR (D):250kW::WUSSR (J):250kW::WUSSR
	WORLD HARVEST R Noblesville,Indiana	100kW::CA
	USSR RADIO MOSCOW/RP&P Kiev	500kW:N AMERICAN:ENA 500kW:WS:ENA
	YEMEN (PDR) 'VO PALESTINE' Via PDR Yemen BC	Irr::100kW:PLO:ME
	PDR YEMEN BC SVC Aden	Irr::100kW:DS:ME Irr:F:100kW:DS:ME
11770.7	INDONESIA R REP INDONESIA Jakarta, Jawa	100kW:DS Su:100kW:DS
11775	CANADA RADIO CANADA INTL Via United Kingdom	(D)M-F:300kW::AF
	CHINA (TAIWAN) CENTRAL BC SYSTEM T'ai-pei	50/100kW:PRC-2
	ECUADOR HCJB-VO THE ANDES Quito	Alternative Frequency to 11910kHz
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AF 250kW::ME/SAS Su:250kW:MARINERS:ATL/NAF
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::SA
	UNITED KINGDOM BBC Via Sackville, Can	250kW:WS:NA Sa/Su:250kW:WS:NA
	USA VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::ME/SAS
	VOICE OF AMERICA Via Philippines	(J):250kW::SEA (D):250kW::EAS
	VOICE OF AMERICA Via Woofferton, UK	300kW::NAF
	USSR RADIO MOSCOW/RP&P Alma-Ata	(J):500kW:CANTONESE,VIET,ETC:SEA (J):500kW:WS:SEA
	RADIO MOSCOW/RP&P Armavir	(J):240kW::EAF
	+RADIO MOSCOW/RP&P Chita	(D):500kW::EAS/SEA
	RADIO MOSCOW/RP&P Irkutsk	(D):500kW:CHI,INDONESIAN:EAS/SEA
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::SAS



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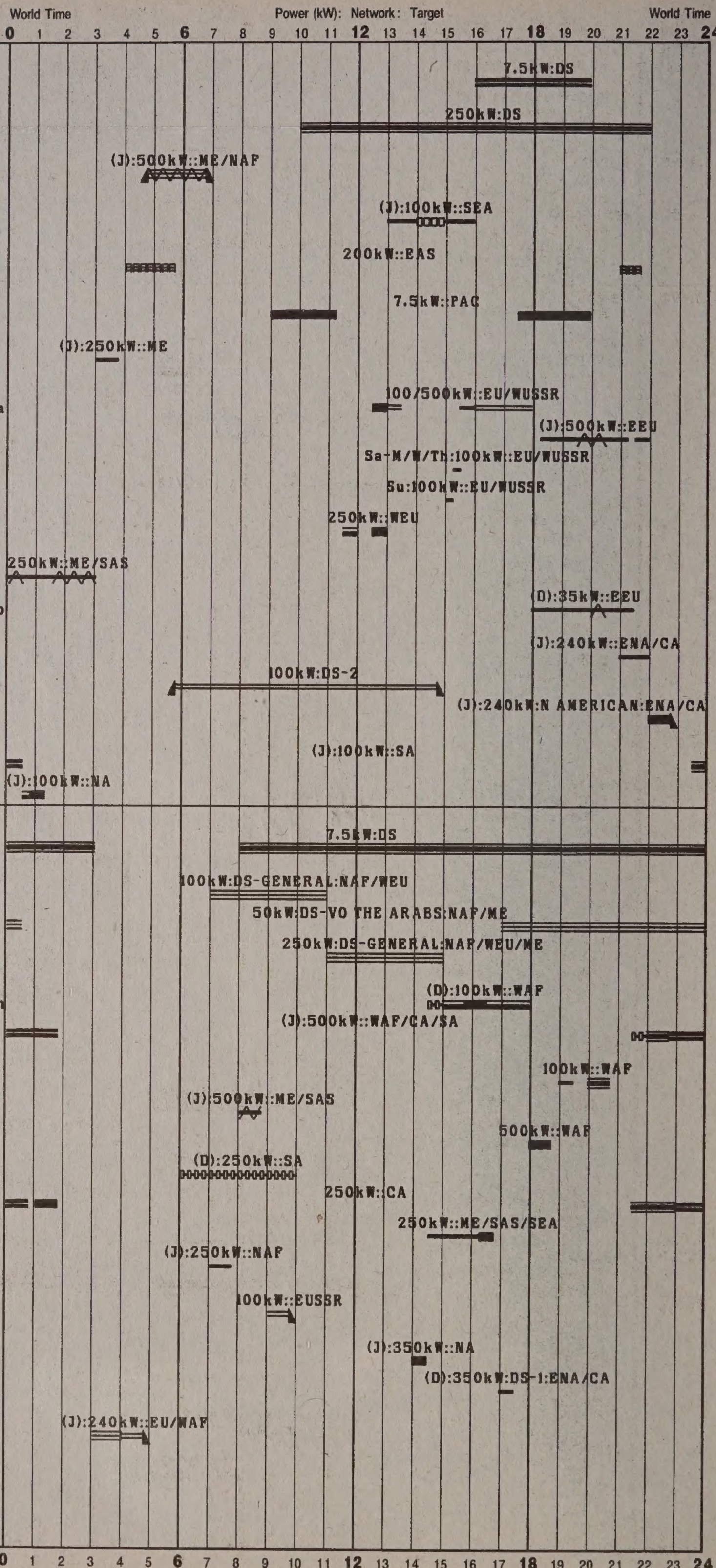

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11780	**ARGENTINA** RADIO BELGRANO Buenos Aires	7.5kW:DS
	BRAZIL R NAC DA AMAZONIA Brasília	250kW:DS
	IRAN VO THE ISLAMIC REP Tehrān	(J):500kW::ME/NAF
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	(J):100kW::SEA
	KOREA (DPR) RADIO PYONGYANG Kujang-dong	200kW::EAS
	NEW ZEALAND RADIO NEW ZEALAND Wellington	7.5kW::PAC
	TURKEY TURKISH RTV CORP Ankara	(J):250kW::ME
	UNITED KINGDOM BBC Holywell-Rampisham	100/500kW::EU/WUSSR (J):500kW::EEU Sa-M/W/Th:100kW::EU/WUSSR Su:100kW::EU/WUSSR
	BBC Various Locations	250kW::WEU
	USA VOICE OF AMERICA Via Kavála, Greece	250kW::ME/SAS
	VOICE OF AMERICA Via Tangier,Morocco	(D):35kW::EEU
	USSR RADIO KIEV L'vov	(J):240kW::ENA/CA
	RADIO MOSCOW Simferopol'	100kW:DS-2
	RADIO MOSCOW/RP&P L'vov	(J):240kW:N AMERICAN:ENA/CA
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	(J):100kW::SA (J):100kW::NA
11785	**BRAZIL** RADIO GUAIBA Pôrto Alegre	7.5kW:DS
	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-GENERAL:NAF/WEU
	RADIO CAIRO Cairo-Mokattam	50kW:DS-VO THE ARABS:NAF/ME
	RADIO CAIRO Kafr Silîm-Abis	250kW:DS-GENERAL:NAF/WEU/ME
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	(D):100kW::WAF
	RADIO BERLIN INTL Nauen	(J):500kW::WAF/CA/SA
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::WAF (J):500kW::ME/SAS
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::WAF
	DEUTSCHE WELLE Via Antigua	(D):250kW::SA
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::CA 250kW::ME/SAS/SEA (J):250kW::NAF
	NORTHERN MARIANA IS KFBS-FAR EAST BC Saipan Island	100kW::EUSSR
	SWEDEN RADIO SWEDEN INTL Hörby	(J):350kW::NA
	SVERIGES RIKSRADIO Hörby	(D):350kW:DS-1:ENA/CA
(con'd)	**USSR** RADIO MOSCOW/RP&P Ryazan'	(J):240kW::EU/WAF

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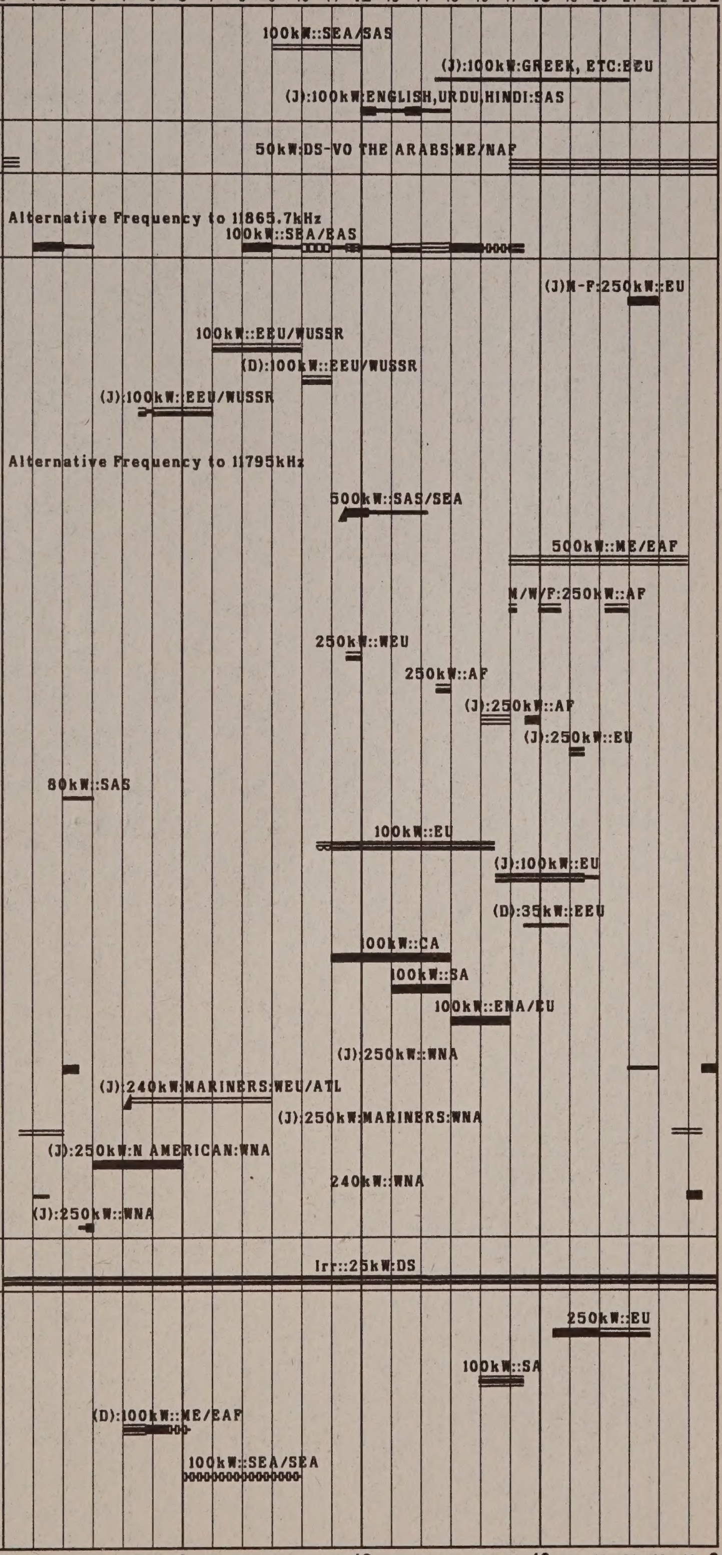
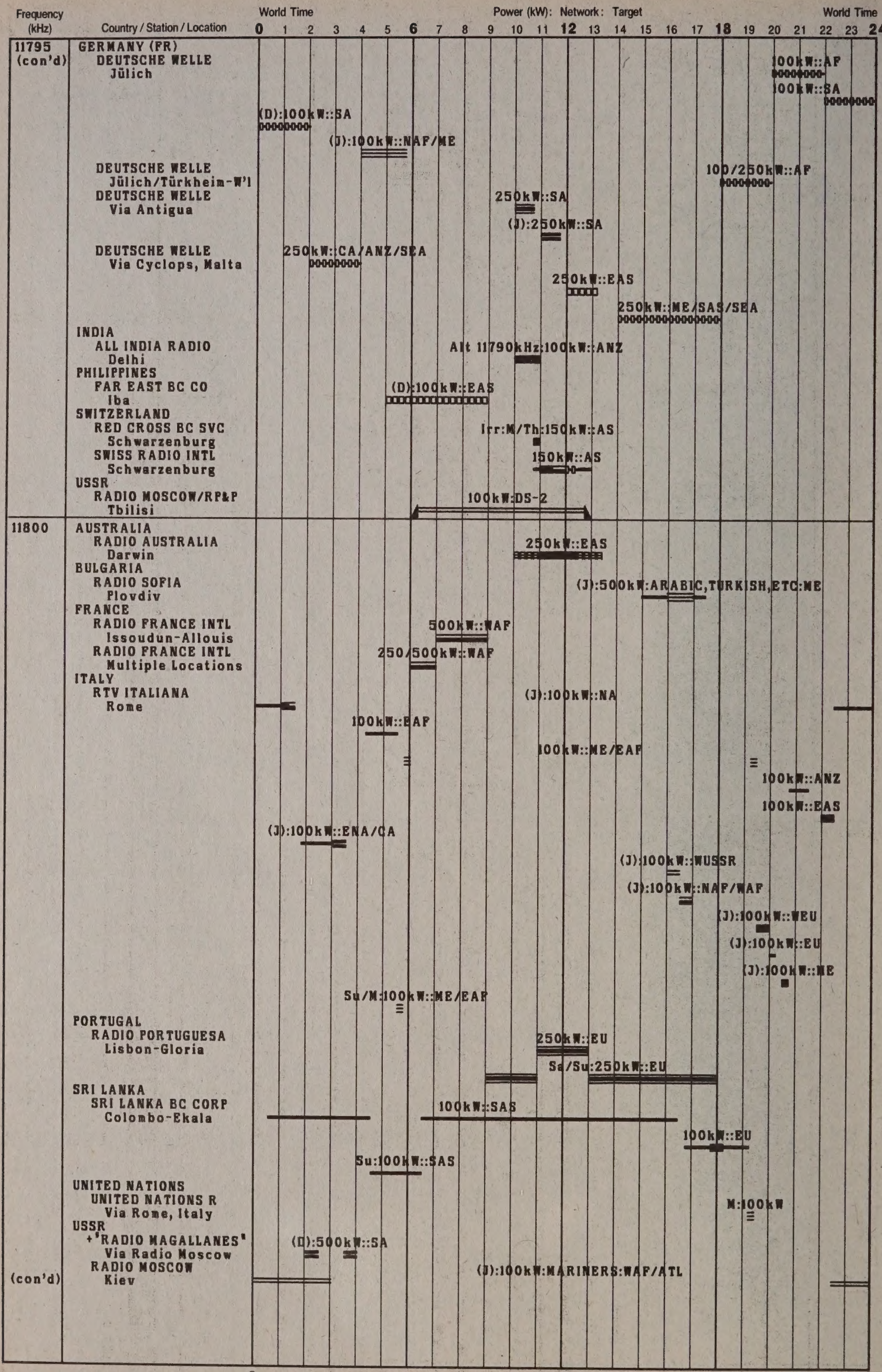
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11785 (con'd)	USSR RADIO MOSCOW/RP&P Tashkent	100kW::SEA/SAS
	RADIO MOSCOW/RP&P Zhigulevsk	(J):100kW:GREEK, ETC:EEU
	RADIO TASHKENT Tashkent	(J):100kW:ENGLISH,URDU,HINDI:SAS
11785v	EGYPT RADIO CAIRO Cairo-Mokattam	50kW:DS-VO THE ARABS:ME/NAF
11788v	INDONESIA R REP INDONESIA Jayapura	Alternative Frequency to 11865.7kHz
	VOICE OF INDONESIA Jakarta, Jawa	100kW::SEA/EAS
11790	CANADA RADIO CANADA INTL Sackville, NB	(J)M-F:250kW::EU
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EEU/WUSSR (D):100kW::EEU/WUSSR (J):100kW::EEU/WUSSR
	INDIA ALL INDIA RADIO Delhi	Alternative Frequency to 11795kHz
	IRAN VO THE ISLAMIC REP Tehrān	500kW::SAS/SEA
	IRAQ RADIO BAGHDAD Balad-Salah el Deen	500kW::ME/EAF
	MONGOLIA RADIO ULAN BATOR Ulan Bator	M/W/F:250kW::AF
	ROMANIA RADIO BUCHAREST Bucharest	250kW::WEU 250kW::AF (J):250kW::AF (J):250kW::EU
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::SAS
	SPAIN R EXTERIOR ESPANA Arganda	100kW::EU (J):100kW::EU
	USA VOICE OF AMERICA Via Tangier,Morocco	(D):35kW::EEU
	WORLD HARVEST R Noblesville,Indiana	100kW::CA 100kW::SA 100kW::ENA/EU
	USSR RADIO KIEV Khabarovsk	(J):250kW::WNA
	RADIO MOSCOW Ryazan'	(J):240kW:MARINERS:WEU/ATL
	RADIO MOSCOW/RP&P Khabarovsk	(J):250kW:MARINERS:WNA (J):250kW:N AMERICAN:WNA
	RADIO VILNIUS Blagoveshchensk	240kW::WNA
	RADIO YEREVAN Khabarovsk	(J):250kW::WNA
11793v	COLOMBIA RADIO NACIONAL Bogotá	Irr::25kW:DS
11795	CUBA RADIO HABANA Havana	250kW::EU
	ECUADOR HCJB-VO THE ANDES Quito	100kW::SA
	GERMANY (DR) RADIO BERLIN INTL Leipzig	(D):100kW::ME/EAF
(con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::SEA/SEA



ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER ─
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11795 (con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::AF 100kW::SA (D):100kW::SA (J):100kW::NAF/ME
	DEUTSCHE WELLE Jülich/Türkheim-W'l	100/250kW::AF
	DEUTSCHE WELLE Via Antigua	250kW::SA (J):250kW::SA
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::CA/ANZ/SEA 250kW::EAS 250kW::ME/SAS/SEA
	INDIA ALL INDIA RADIO Delhi	Alt 11790kHz:100kW::ANZ
	PHILIPPINES FAR EAST BC CO Iba	(D):100kW::EAS
	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:M/Th:150kW::AS
	SWISS RADIO INTL Schwarzenburg	150kW::AS
	USSR RADIO MOSCOW/RP&P Tbilisi	100kW:DS-2
11800	AUSTRALIA RADIO AUSTRALIA Darwin	250kW::EAS
	BULGARIA RADIO SOFIA Plovdiv	(J):500kW:ARABIC,TURKISH,ETC:ME
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	500kW::WAF
	RADIO FRANCE INTL Multiple Locations	250/500kW::WAF
	ITALY RTV ITALIANA Rome	(J):100kW::NA 100kW::EAF 100kW::ME/EAF 100kW::ANZ 100kW::EAS (J):100kW::ENA/CA (J):100kW::WUSSR (J):100kW::NAF/WAF (J):100kW::WEU (J):100kW::EU (J):100kW::ME Su/M:100kW::ME/EAF
	PORTUGAL RADIO PORTUGUESA Lisbon-Gloria	250kW::EU Sa/Su:250kW::EU
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	100kW::SAS 100kW::EU Su:100kW::SAS
	UNITED NATIONS UNITED NATIONS R Via Rome, Italy	M:100kW
	USSR +"RADIO MAGALLANES" Via Radio Moscow	(D):500kW::SA
(con'd)	RADIO MOSCOW Kiev	(J):100kW:MARINERS:WAF/ATL

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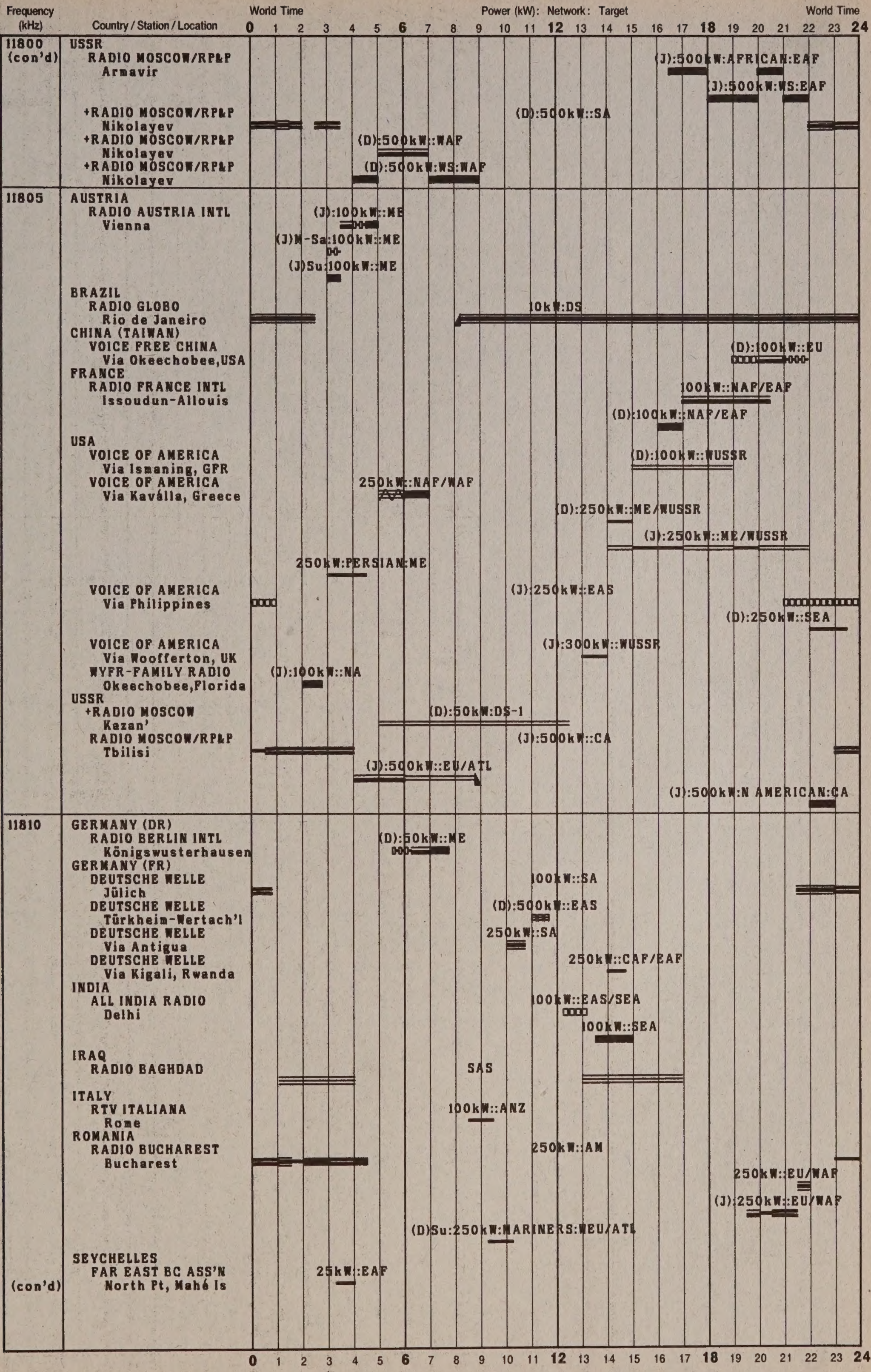

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11800 (con'd)	USSR	
	RADIO MOSCOW/RP&P Armavir	(J):500kW:AFRICAN:EAF (J):500kW:WS:EAF
	+RADIO MOSCOW/RP&P Nikolayev	(D):500kW::SA
	+RADIO MOSCOW/RP&P Nikolayev	(D):500kW::WAF
	+RADIO MOSCOW/RP&P Nikolayev	(D):500kW:WS:WAF
11805	AUSTRIA	
	RADIO AUSTRIA INTL Vienna	(J):100kW::ME (J)M-Sa:100kW::ME (J)Su:100kW::ME
	BRAZIL	
	RADIO GLOBO Rio de Janeiro	10kW:DS
	CHINA (TAIWAN)	
	VOICE FREE CHINA Via Okeechobee,USA	(D):100kW::EU
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	100kW::NAF/EAF (D):100kW::NAF/EAF
	USA	
	VOICE OF AMERICA Via Ismaning, GFR	(D):100kW::WUSSR
	VOICE OF AMERICA Via Kavála, Greece	250kW::NAF/WAF (D):250kW::ME/WUSSR (J):250kW::ME/WUSSR 250kW:PERSIAN:ME
	VOICE OF AMERICA Via Philippines	(J):250kW::EAS (D):250kW::SEA
	VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	(J):100kW::NA
	USSR	
	+RADIO MOSCOW Kazan'	(D):50kW:DS-1
	RADIO MOSCOW/RP&P Tbilisi	(J):500kW::CA (J):500kW::EU/ATL (J):500kW:N AMERICAN:CA
11810	GERMANY (DR)	
	RADIO BERLIN INTL Königswusterhausen	(D):50kW::ME
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	100kW::SA
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::EAS
	DEUTSCHE WELLE Via Antigua	250kW::SA
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::CAF/EAF
	INDIA	
	ALL INDIA RADIO Delhi	100kW::EAS/SEA 100kW::SEA
	IRAQ	
	RADIO BAGHDAD	SAS
	ITALY	
	RTV ITALIANA Rome	100kW::ANZ
	ROMANIA	
	RADIO BUCHAREST Bucharest	250kW::AM 250kW::EU/WAF (J):250kW::EU/WAF (D)Su:250kW:MARINERS:WEU/ATL
	SEYCHELLES	
(con'd)	FAR EAST BC ASS'N North Pt, Mahé Is	25kW::EAF

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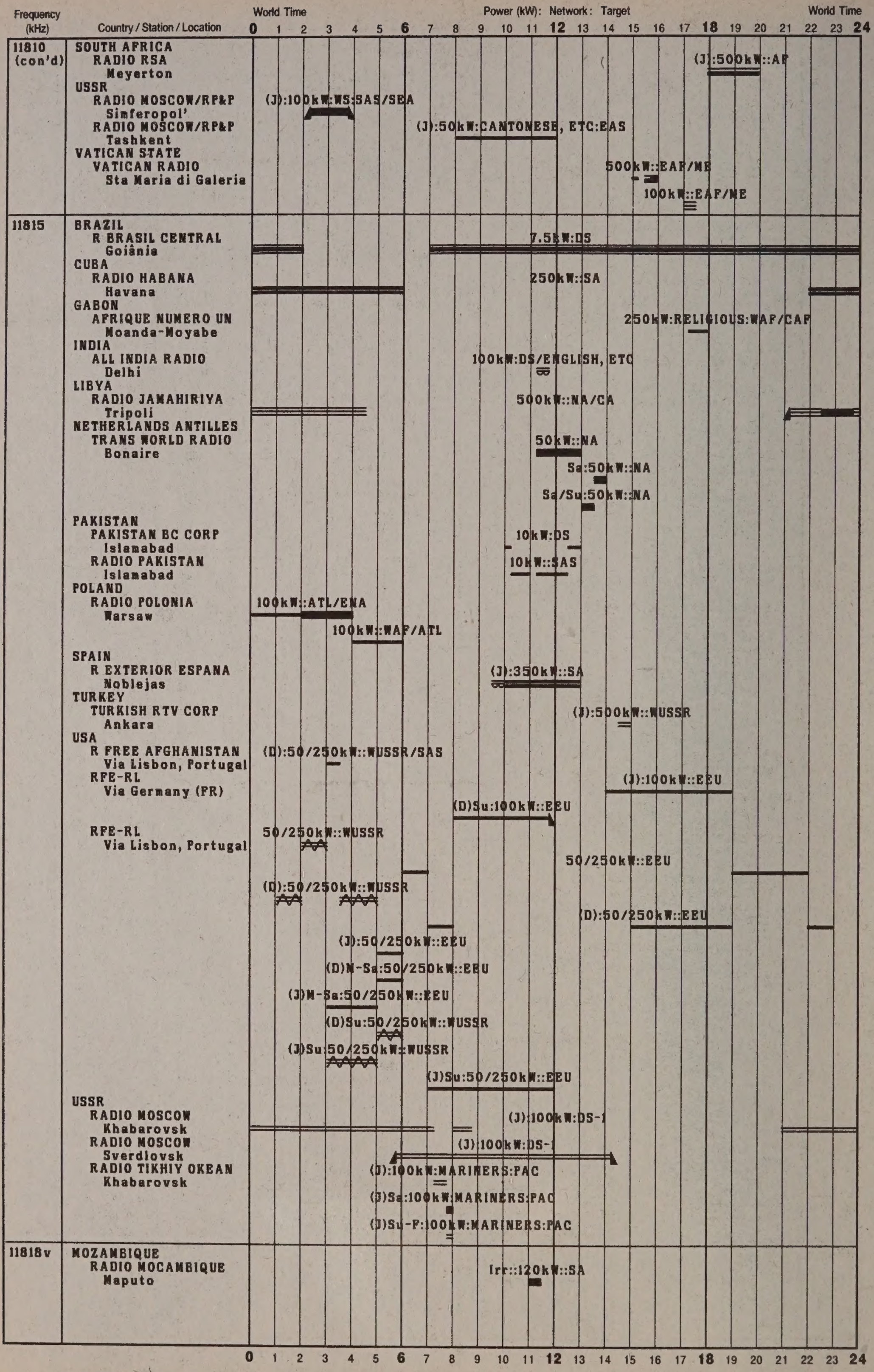

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11810 (con'd)	SOUTH AFRICA RADIO RSA Meyerton	(J):500kW::AF
	USSR RADIO MOSCOW/RP&P Simferopol'	(J):100kW:WS:SAS/SEA
	RADIO MOSCOW/RP&P Tashkent	(J):50kW:CANTONESE, ETC:EAS
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	500kW::EAF/ME 100kW::EAF/ME
11815	BRAZIL R BRASIL CENTRAL Goiânia	7.5kW:DS
	CUBA RADIO HABANA Havana	250kW::SA
	GABON AFRIQUE NUMERO UN Moanda-Moyabe	250kW:RELIGIOUS:WAF/CAF
	INDIA ALL INDIA RADIO Delhi	100kW:DS/ENGLISH, ETC
	LIBYA RADIO JAMAHIRIYA Tripoli	500kW::NA/CA
	NETHERLANDS ANTILLES TRANS WORLD RADIO Bonaire	50kW::NA Sa:50kW::NA Sa/Su:50kW::NA
	PAKISTAN PAKISTAN BC CORP Islamabad	10kW:DS
	RADIO PAKISTAN Islamabad	10kW::SAS
	POLAND RADIO POLONIA Warsaw	100kW::ATL/ENA 100kW::WAF/ATL
	SPAIN R EXTERIOR ESPANA Noblejas	(J):350kW::SA
	TURKEY TURKISH RTV CORP Ankara	(J):500kW::WUSSR
	USA R FREE AFGHANISTAN Via Lisbon, Portugal	(D):50/250kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	(J):100kW::EEU (D)Su:100kW::EEU
	RFE-RL Via Lisbon, Portugal	50/250kW::WUSSR 50/250kW::EEU (D):50/250kW::WUSSR (D):50/250kW::EEU (J):50/250kW::EEU (D)M-Sa:50/250kW::EEU (J)M-Sa:50/250kW::EEU (D)Su:50/250kW::WUSSR (J)Su:50/250kW::WUSSR (J)Su:50/250kW::EEU
	USSR RADIO MOSCOW Khabarovsk	(J):100kW:DS-1
	RADIO MOSCOW Sverdlovsk	(J):100kW:DS-1
	RADIO TIKHIY OKEAN Khabarovsk	(J):100kW:MARINERS:PAC (J)Sa:100kW:MARINERS:PAC (J)Su-F:100kW:MARINERS:PAC
11818v	MOZAMBIQUE RADIO MOCAMBIQUE Maputo	Irr::120kW::SA

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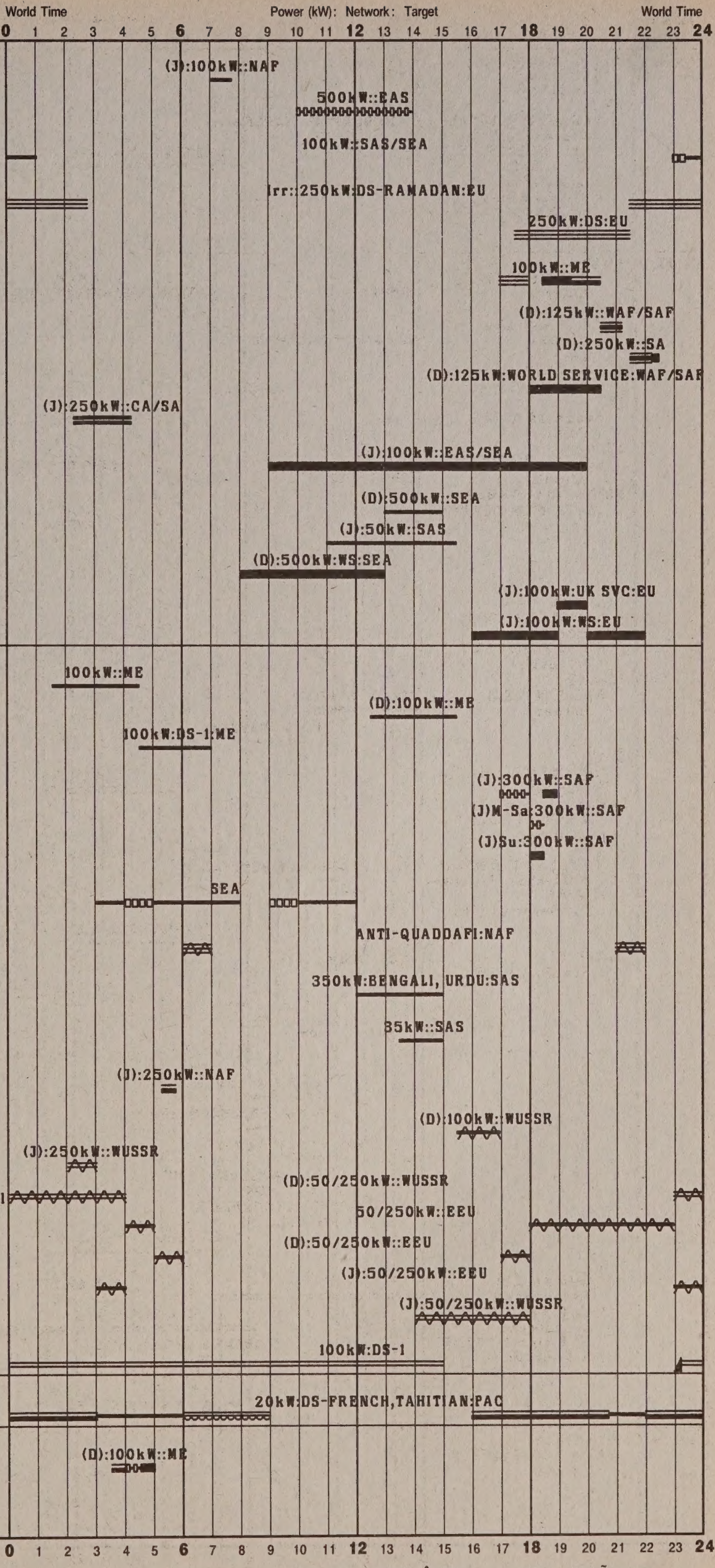
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11820	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	(J):100kW::NAF
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EAS
	PHILIPPINES	
	RADIO VERITAS ASIA Malolos	100kW::SAS/SEA
	QATAR	
	QATAR BC SERVICE Doha	Irr::250kW:DS-RAMADAN:EU 250kW:DS:EU
	SPAIN	
	R EXTERIOR ESPANA Arganda	100kW::ME
	UNITED KINGDOM	
	BBC Via Ascension	(D):125kW::WAF/SAF (D):250kW::SA (D):125kW:WORLD SERVICE:WAF/SAF
	BBC Via Delano, USA	(J):250kW::CA/SA
	USA	
	KNLS-NEW LIFE STN Anchor Pt, Alaska	(J):100kW::EAS/SEA
	USSR	
	+RADIO MOSCOW/RP&P Frunze, Kirgiziya	(D):500kW::SEA
	RADIO MOSCOW/RP&P Frunze, Kirgiziya	(J):50kW::SAS
	+RADIO MOSCOW/RP&P Frunze, Kirgiziya	(D):500kW:WS:SEA
	RADIO MOSCOW/RP&P Voronezh	(J):100kW:UK SVC:EU (J):100kW:WS:EU
11825	AFGHANISTAN	
	RADIO AFGHANISTAN Kabul	100kW::ME
	+RADIO AFGHANISTAN Kabul	(D):100kW::ME
	RADIO AFGHANISTAN Kabul	100kW:DS-1:ME
	AUSTRIA	
	RADIO AUSTRIA INTL Vienna	(J):300kW::SAF (J)M-Sa:300kW::SAF (J)Su:300kW::SAF
	CHINA (TAIWAN)	
	VOICE FREE CHINA T'ai-pei	SEA
	CLANDESTINE (AFRICA)	
	"VO LIBYAN PEOPLE" Southern Chad	ANTI-QUADDAFI:NAF
	SAUDI ARABIA	
	BS OF THE KINGDOM Riyadh	350kW:BENGALI, URDU:SAS
	SRI LANKA	
	TRANS WORLD RADIO Colombo-Ekala	35kW::SAS
	UNITED KINGDOM	
	BBC Skelton, Cumbria	(J):250kW::NAF
	USA	
	RFE-RL Via Germany (FR)	(D):100kW::WUSSR (J):250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR 50/250kW::EEU (D):50/250kW::EEU (J):50/250kW::EEU (J):50/250kW::WUSSR
	USSR	
	RADIO MOSCOW Kenga	100kW:DS-1
11825.8	SOCIETY ISLANDS RFO-TAHITI Papeete	20kW:DS-FRENCH,TAHITIAN:PAC
11830 (con'd)	AUSTRIA RADIO AUSTRIA INTL Vienna	(D):100kW::ME



ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)
Country / Station / Location

11830 (con'd)

AUSTRIA
RADIO AUSTRIA INTL
Vienna

GERMANY (FR)
DEUTSCHE WELLE
Türkheim-Wertach'l

INDIA
ALL INDIA RADIO
Bombay
ALL INDIA RADIO
Delhi

KOREA (DPR)
RADIO PYONGYANG
Kujang-dong

LIBERIA
RADIO ELWA
Monrovia

ROMANIA
RADIO BUCHAREST
Bucharest

UNITED KINGDOM
BBC
Via Maseru, Lesotho

USA
VOICE OF THE OAS
Cincinnati, Ohio
WYFR-FAMILY RADIO
Okeechobee,Florida

USSR
RADIO MOSCOW/RP&P
Moscow

VATICAN STATE
VATICAN RADIO
Sta Maria di Galeria

11835

ALBANIA
RADIO TIRANA
Lushnjë

BULGARIA
RADIO SOFIA
Rebrovo-Sofia

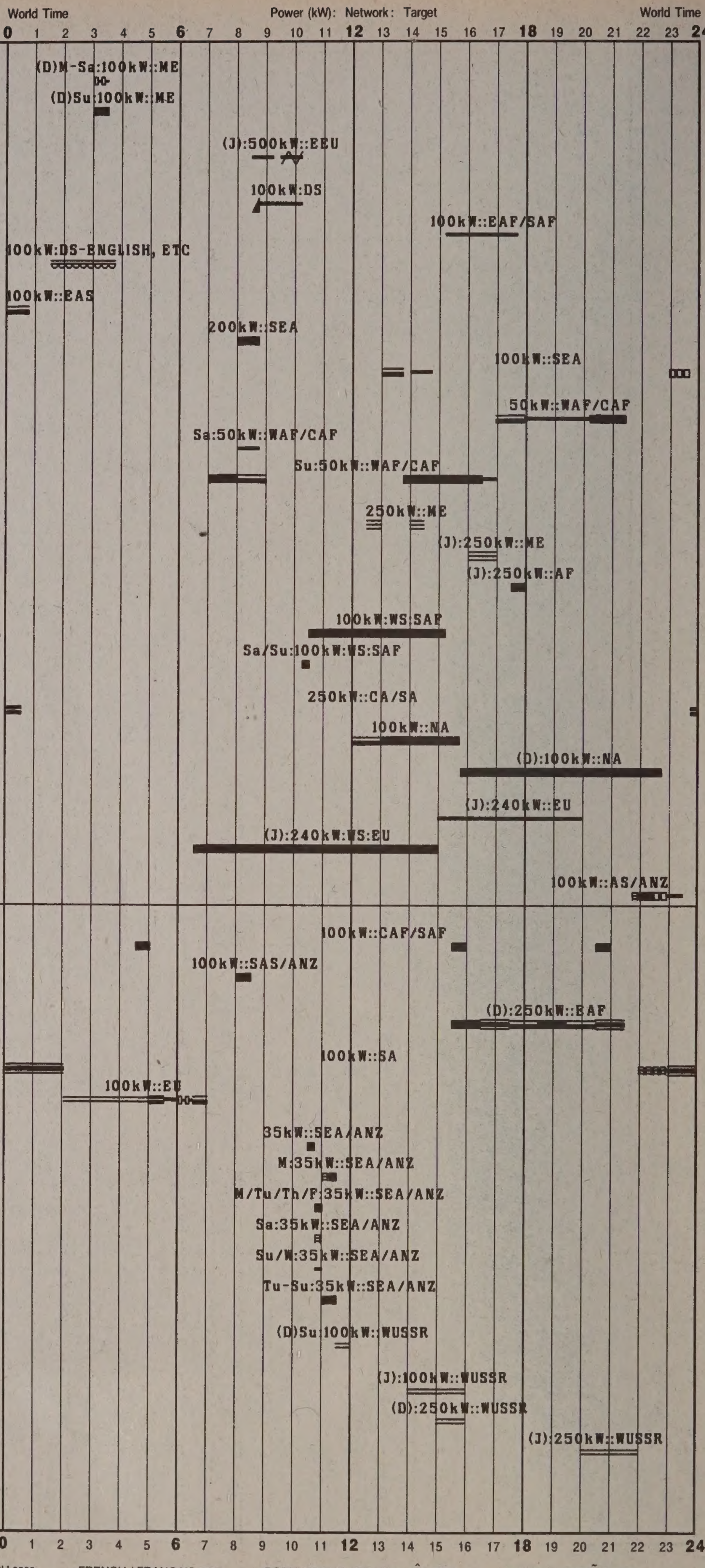
ECUADOR
HCJB-VO THE ANDES
Quito

SRI LANKA
SRI LANKA BC CORP
Colombo-Ekala

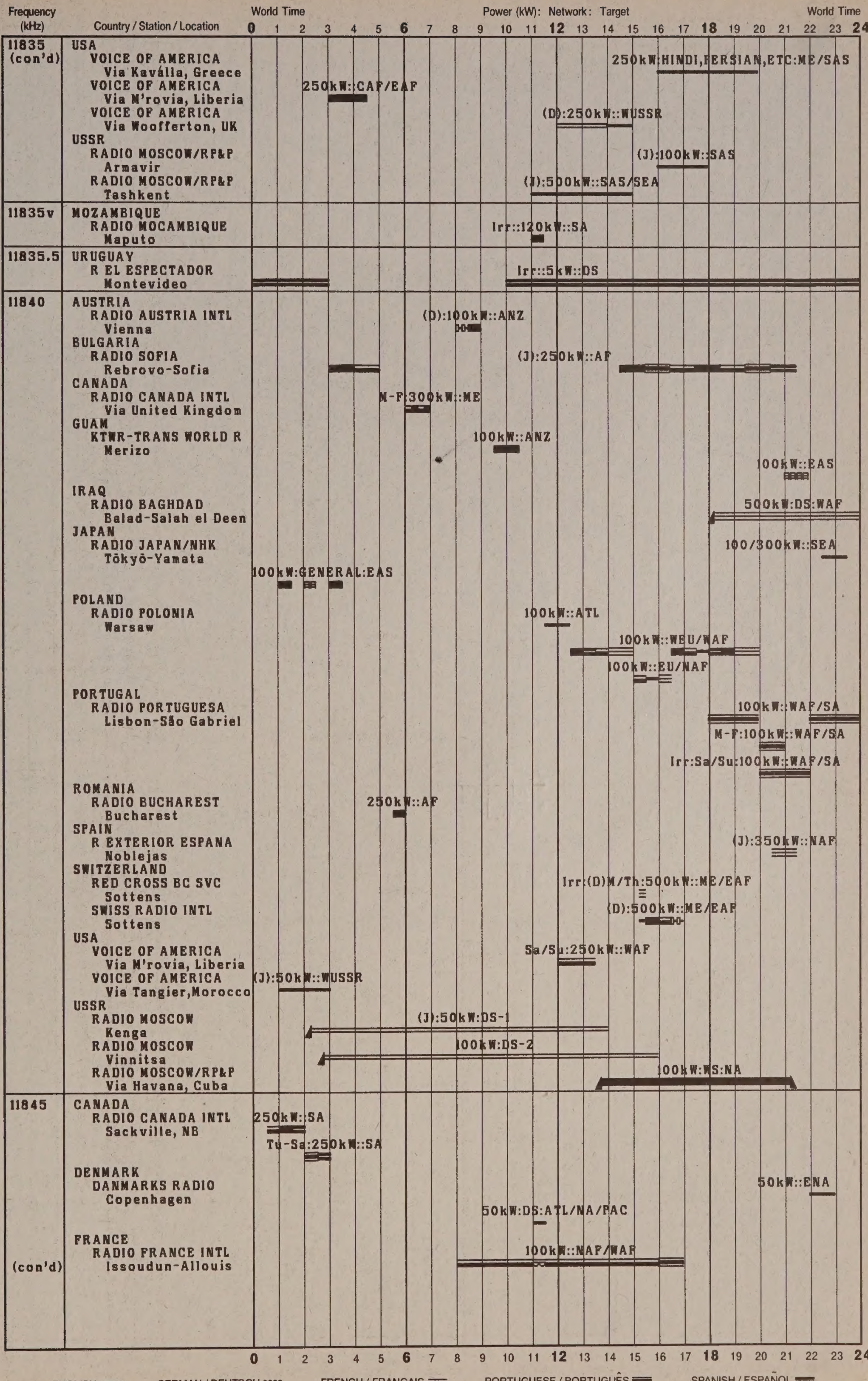
UNITED KINGDOM
BBC
Via Maşirah, Oman

USA
VOICE OF AMERICA
Via Ismaning, GFR
VOICE OF AMERICA
Via Kaválla, Greece

(con'd)



ENGLISH ▬ GERMAN / DEUTSCH ▭▭▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭▭▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11835 (con'd)	**USA**	
	VOICE OF AMERICA Via Kavála, Greece	250kW:HINDI,PERSIAN,ETC:ME/SAS
	VOICE OF AMERICA Via M'rovia, Liberia	250kW::CAF/EAF
	VOICE OF AMERICA Via Woofferton, UK	(D):250kW::WUSSR
	USSR	
	RADIO MOSCOW/RP&P Armavir	(J):100kW::SAS
	RADIO MOSCOW/RP&P Tashkent	(J):500kW::SAS/SEA
11835v	**MOZAMBIQUE**	
	RADIO MOCAMBIQUE Maputo	Irr::120kW::SA
11835.5	**URUGUAY**	
	R EL ESPECTADOR Montevideo	Irr::5kW::DS
11840	**AUSTRIA**	
	RADIO AUSTRIA INTL Vienna	(D):100kW::ANZ
	BULGARIA	
	RADIO SOFIA Rebrovo-Sofia	(J):250kW::AF
	CANADA	
	RADIO CANADA INTL Via United Kingdom	M-F:300kW::ME
	GUAM	
	KTWR-TRANS WORLD R Merizo	100kW::ANZ 100kW::EAS
	IRAQ	
	RADIO BAGHDAD Balad-Salah el Deen	500kW:DS:WAF
	JAPAN	
	RADIO JAPAN/NHK Tōkyō-Yamata	100/300kW::SEA 100kW:GENERAL:EAS
	POLAND	
	RADIO POLONIA Warsaw	100kW::ATL 100kW::WEU/WAF 100kW::EU/NAF
	PORTUGAL	
	RADIO PORTUGUESA Lisbon-São Gabriel	100kW::WAF/SA M-F:100kW::WAF/SA Irr:Sa/Su:100kW::WAF/SA
	ROMANIA	
	RADIO BUCHAREST Bucharest	250kW::AF
	SPAIN	
	R EXTERIOR ESPANA Noblejas	(J):350kW::NAF
	SWITZERLAND	
	RED CROSS BC SVC Sottens	Irr:(D)M/Th:500kW::ME/EAF
	SWISS RADIO INTL Sottens	(D):500kW::ME/EAF
	USA	
	VOICE OF AMERICA Via M'rovia, Liberia	Sa/Su:250kW::WAF
	VOICE OF AMERICA Via Tangier,Morocco	(J):50kW::WUSSR
	USSR	
	RADIO MOSCOW Kenga	(J):50kW:DS-1
	RADIO MOSCOW Vinnitsa	100kW:DS-2
	RADIO MOSCOW/RP&P Via Havana, Cuba	100kW:WS:NA
11845	**CANADA**	
	RADIO CANADA INTL Sackville, NB	250kW::SA Tu-Sa:250kW::SA
	DENMARK	
	DANMARKS RADIO Copenhagen	50kW::ENA 50kW:DS:ATL/NA/PAC
	FRANCE	
(con'd)	RADIO FRANCE INTL Issoudun-Allouis	100kW::NAF/WAF

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ═
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▦ MULTILINGUAL ▤ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

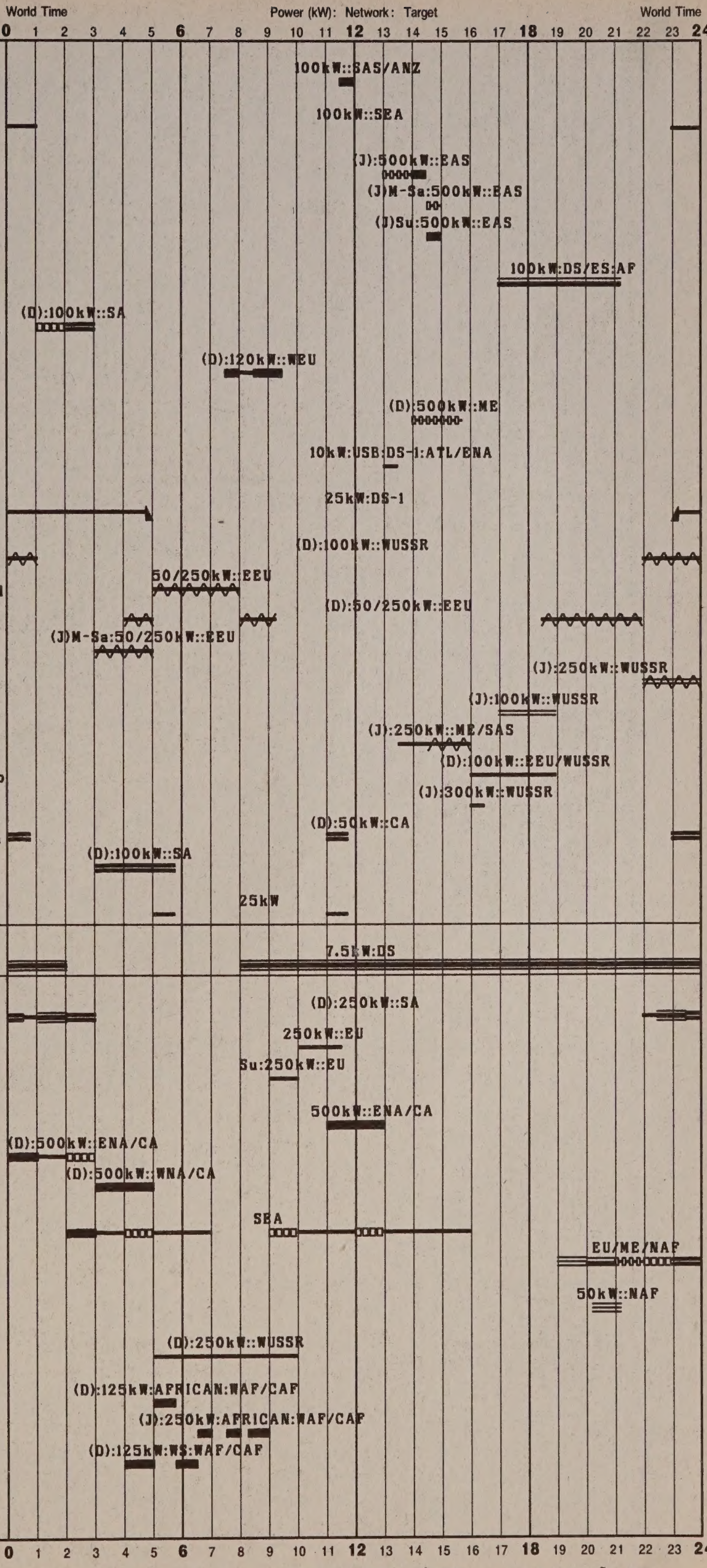
Frequency (kHz)	Country / Station / Location	World Time 0–24 · Power (kW): Network: Target
11845 (con'd)	**GERMANY (FR)** DEUTSCHE WELLE Jülich	(D):100kW::WUSSR (J):100kW::EU/ME
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::CAF/SAF
	DEUTSCHE WELLE Via Cyclops, Malta	(J):250kW::EAS
	INDIA ALL INDIA RADIO Delhi	100kW::EAF
	SWEDEN RADIO SWEDEN INTL Hörby	Alt 9605kHz:(D):350kW::ME (J):350kW::AF
	USA VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::ME/SAS
	VOICE OF AMERICA Via Philippines	(D):250kW::SEA
	VOICE OF AMERICA Via Tangier,Morocco	(J):35kW::EEU
	USSR RADIO MOSCOW/RP&P Kazan'	(J):100kW:URDU, HINDI, ETC:SAS/SEA 100kW:WS:SAS/SEA
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	(D):100kW::NA (D):100kW::SA 100kW:D:SA
11850	**FINLAND** RADIO FINLAND Pori	(D):500kW::ME/SAS/EAF (D)Sa:500kW::ME/SAS/EAF (D)Su-F:500kW::ME/SAS/EAF
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::EAS
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EEU
	GUAM KTWR-TRANS WORLD R Merizo	100kW::EAS
	INDIA ALL INDIA RADIO Delhi	100kW:DS-ENGLISH, ETC
	NORWAY RADIO NORWAY INTL Fredrikstad	(D)M-Sa:120/350kW::ENA/CA (D)Su:120/350kW::ENA/CA (D)Tu-Su:120/350kW::ENA/CA (D)M:120/350kW:SPANISH, ETC:ENA/CA
	PHILIPPINES FAR EAST BC CO Bocaue	50kW::ANZ/EAS 50kW::SEA/SAS
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/SAF M-F:250kW::WAF/SAF
	VOICE OF AMERICA Via Tangier,Morocco	(D):50kW::WUSSR (D):35kW::WUSSR
	USSR RADIO MOSCOW Konevo	(D):240kW::EU
	RADIO MOSCOW/RP&P Ryazan'	200kW:AFRICAN:ME/EAF 200kW:WS:ME/EAF
	RADIO MOSCOW/RP&P Via Plovdiv,Bulgaria	(J):500kW::CA
11852v	**VENEZUELA** RADIO NACIONAL Caracas	Alternative Frequency to 11862vkHz
11855 (con'd)	**ALBANIA** RADIO TIRANA Lushnjë	100kW::CAF/SAF

ID + F.ID
0255
5/16/88

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭▭▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
ARABIC / عربى ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭▭▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11855 (con'd)	ALBANIA RADIO TIRANA Lushnjë	100kW::SAS/ANZ
	AUSTRALIA RADIO AUSTRALIA Carnarvon	100kW::SEA
	AUSTRIA RADIO AUSTRIA INTL Vienna	(J):500kW::EAS (J)M-Sa:500kW::EAS (J)Su:500kW::EAS
	BELGIUM RT BELGE FRANCAISE Wavre	100kW:DS/ES:AF
	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(D):100kW::SA
	CZECHOSLOVAKIA RADIO PRAGUE Pieštány-Velké K'y	(D):120kW::WEU
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::ME
	ICELAND RIKISUTVARPID Reykjavik	10kW:USB:DS-1:ATL/ENA
	MONGOLIA RADIO ULAN BATOR Ulan Bator	25kW:DS-1
	USA RFE-RL Via Germany (FR)	(D):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	50/250kW::EEU (D):50/250kW::EEU (J)M-Sa:50/250kW::EEU
	RFE-RL Via Pals, Spain	(J):250kW::WUSSR
	VOICE OF AMERICA Via Ismaning, GFR	(J):100kW::WUSSR
	VOICE OF AMERICA Via Kavála, Greece	(J):250kW::ME/SAS
	VOICE OF AMERICA Via Tangier,Morocco	(D):100kW::EEU/WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):50kW::CA (D):100kW::SA
	USSR RADIO MOSCOW/RP&P Via Mongolia	25kW
11856v	BRAZIL RADIO APARECIDA Aparecida	7.5kW:DS
11860	BULGARIA RADIO SOFIA Rebrovo-Sofia	(D):250kW::SA 250kW::EU Su:250kW::EU
	CHINA (PR) RADIO BEIJING Shijiazhuang	500kW::ENA/CA
	+RADIO BEIJING Shijiazhuang	(D):500kW::ENA/CA
	+RADIO BEIJING Shijiazhuang	(D):500kW::WNA/CA
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	SEA EU/ME/NAF
	LIBERIA RADIO ELWA Monrovia	50kW::NAF
	TURKEY TURKISH RTV CORP Ankara	(D):250kW::WUSSR
	UNITED KINGDOM BBC Via Ascension	(D):125kW:AFRICAN:WAF/CAF (J):250kW:AFRICAN:WAF/CAF (D):125kW:WS:WAF/CAF
(con'd)		



ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬

ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —

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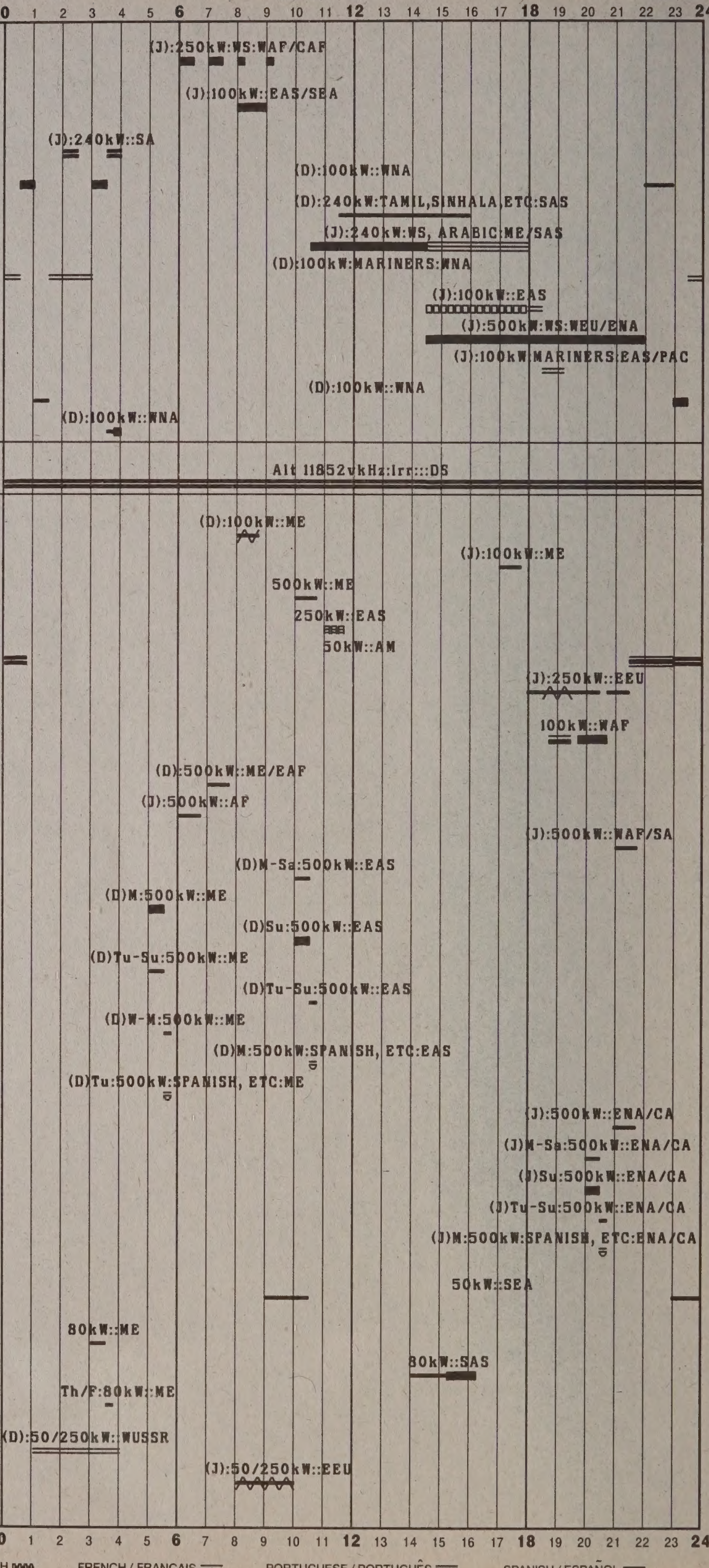

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11860 (con'd)	**UNITED KINGDOM**	
	BBC Via Ascension	(J):250kW:WS:WAF/CAF
	USA	
	KNLS-NEW LIFE STN Anchor Pt, Alaska	(J):100kW::EAS/SEA
	USSR	
	'RADIO MAGALLANES' Via Radio Moscow	(J):240kW::SA
	RADIO KIEV Khabarovsk	(D):100kW::WNA
	RADIO MOSCOW/RP&P Gor'kiy	(D):240kW:TAMIL,SINHALA,ETC:SAS (J):240kW:WS, ARABIC:ME/SAS
	RADIO MOSCOW/RP&P Khabarovsk	(D):100kW:MARINERS:WNA
	RADIO MOSCOW/RP&P Krasnoyarsk	(J):100kW::EAS
	RADIO MOSCOW/RP&P Vinnitsa	(J):500kW:WS:WEU/ENA
	RADIO TIKHIY OKEAN Krasnoyarsk	(J):100kW:MARINERS:EAS/PAC
	RADIO VILNIUS Khabarovsk	(D):100kW::WNA
	RADIO YEREVAN Khabarovsk	(D):100kW::WNA
11862v	**VENEZUELA**	
	RADIO NACIONAL Caracas	Alt 11852vkHz:Irr:::DS
11865	**GERMANY (FR)**	
	DEUTSCHE WELLE Jülich	(D):100kW::ME (J):100kW::ME
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::ME
	DEUTSCHE WELLE Via Cyclops, Malta	250kW::EAS
	DEUTSCHE WELLE Via Montserrat	50kW::AM
	DEUTSCHE WELLE Via Sines, Portugal	(J):250kW::EEU
	INDIA	
	ALL INDIA RADIO Delhi	100kW::WAF
	NORWAY	
	RADIO NORWAY INTL Kvitsøy	(D):500kW::ME/EAF (J):500kW::AF (J):500kW::WAF/SA (D)M-Sa:500kW::EAS (D)M:500kW::ME (D)Su:500kW::EAS (D)Tu-Su:500kW::ME (D)Tu-Su:500kW::EAS (D)W-M:500kW::ME (D)M:500kW:SPANISH, ETC:EAS (D)Tu:500kW:SPANISH, ETC:ME
	RADIO NORWAY INTL Sveio	(J):500kW::ENA/CA (J)M-Sa:500kW::ENA/CA (J)Su:500kW::ENA/CA (J)Tu-Su:500kW::ENA/CA (J)M:500kW:SPANISH, ETC:ENA/CA
	PHILIPPINES	
	FAR EAST BC CO Bocaue	50kW::SEA
	SEYCHELLES	
	FAR EAST BC ASS'N North Pt, Mahé Is	80kW::ME 80kW::SAS Th/F:80kW::ME
	USA	
(con'd)	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR (J):50/250kW::EEU

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11865 (con'd)	USA VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	300kW::WUSSR/EEU (D):300kW::WUSSR/EEU (J):300kW::WUSSR/EEU
	USSR RADIO MOSCOW Novosibirsk	(J):100kW:DS-2
11865.7	INDONESIA R REP INDONESIA Jayapura	25kW:DS-NASIONAL Alt 11788vkHz:25kW:DS-NASIONAL Su:25kW:DS-NASIONAL
11870	ALBANIA RADIO TIRANA Lushnjë	100kW:TURKISH:ME
	BULGARIA RADIO SOFIA Plovdiv	(J):500kW:ARABIC,TURKISH,ETC:ME
	RADIO SOFIA Rebrovo-Sofia	(J):250kW::CA/SA
	CLANDESTINE (ASIA) "VO DEM KAMPUCHEA" Kunming, China(PR)	50kW:PRO-KHMER ROUGE:SEA
	INDIA ALL INDIA RADIO Aligarh	250kW::ANZ
	LAOS LAO NATIONAL RADIO Via USSR	240kW::EU
	NORWAY RADIO NORWAY INTL Fredrikstad	(J):120/350kW::WNA (J)M-Sa:120/350kW::EU/WAF (J)Su:120/350kW::EU/WAF (J)Tu-Su:120/350kW::EU/WAF (J)M:120/350kW:SPANISH, ETC:EU/WAF
	USSR RADIO MOSCOW/RP&P Khabarovsk	(J):240kW:CHI,CANTONESE,ETC:EAS/SEA
11875	EGYPT RADIO CAIRO Kafr Silim-Abis	Alternative Frequency to 17785kHz
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::ANZ 100kW::SEA (D):100kW::SEA
	USA R FREE AFGHANISTAN Via Germany (FR)	100kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	100kW::WUSSR (D):100kW::WUSSR (J):100kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	M-F:250kW::NAF
	VOICE OF AMERICA Via Woofferton, UK	300kW::NAF
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::ENA
11880	NORWAY RADIO NORWAY INTL Fredrikstad	(D):120/350kW::AF
	SPAIN R EXTERIOR ESPANA Noblejas	(J):350kW::NA/CA
	USSR RADIO MOSCOW/RP&P Moscow	(J):240kW::EU (J):240kW:TAMIL, ETC:SAS
	ZAMBIA RADIO ZAMBIA-ZBS Lusaka	Irr:Su:50kW::SAF
11885 (con'd)	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(D):100kW::SA

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ☰

ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▦ MULTILINGUAL ▭ OTHER —

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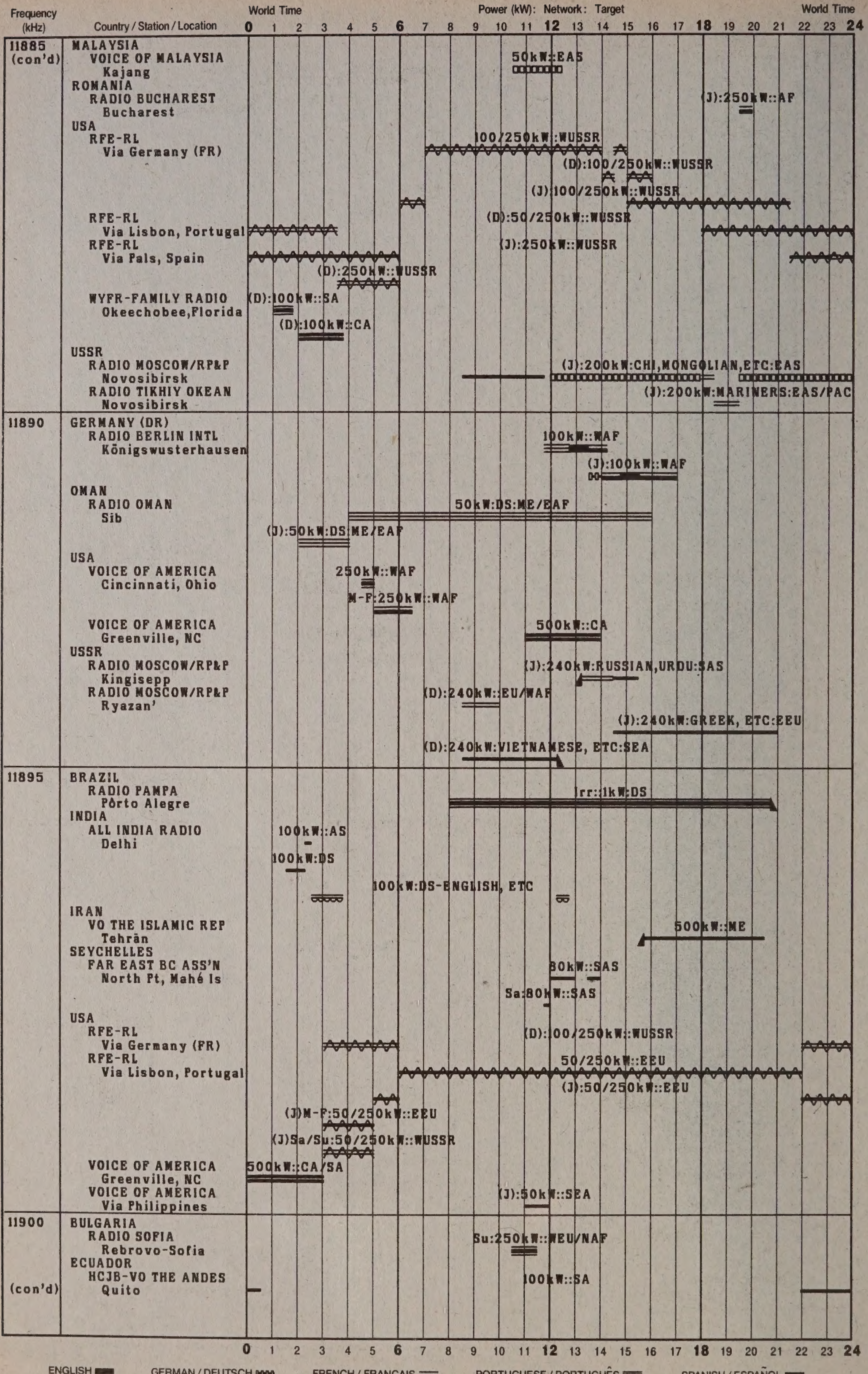
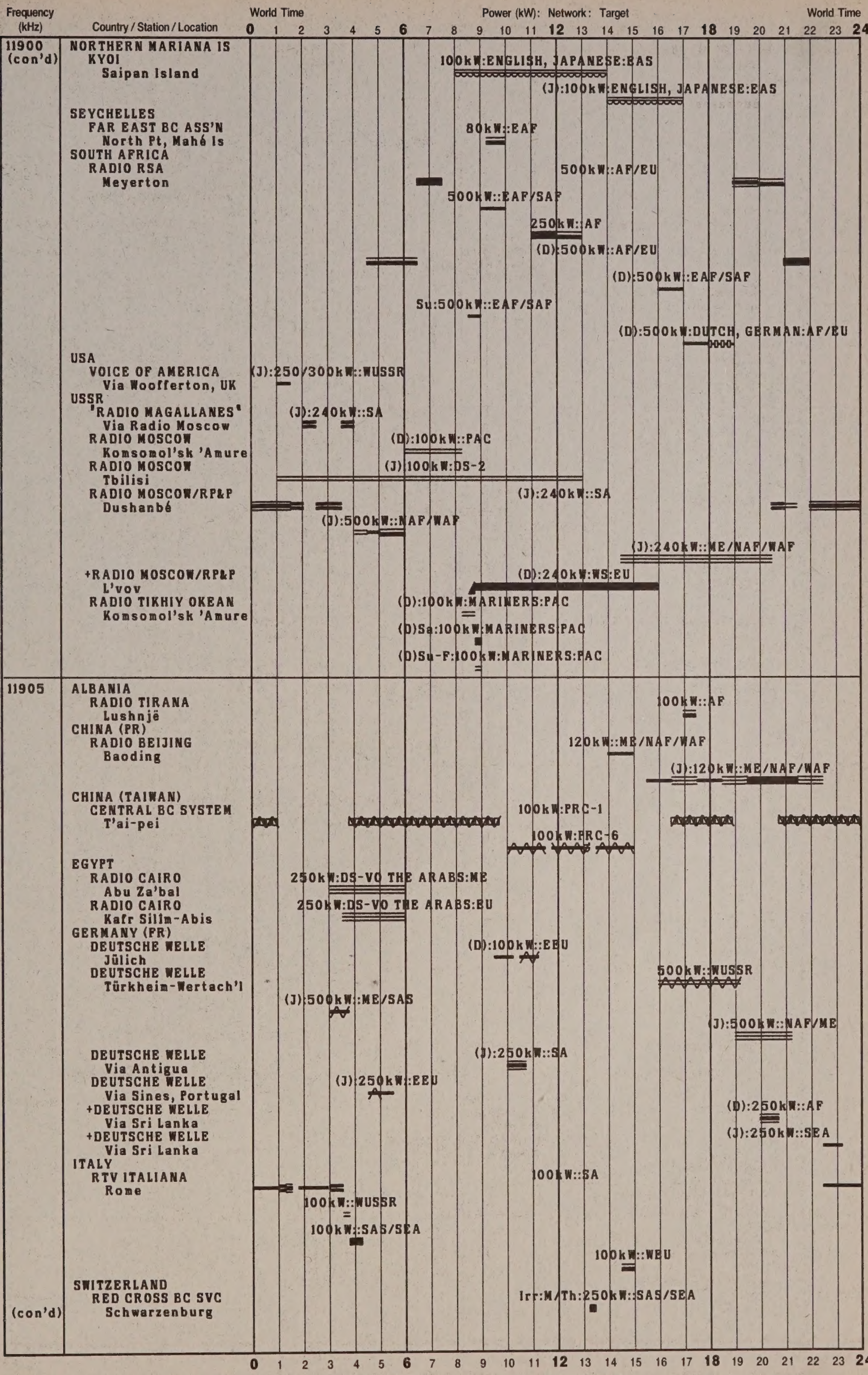


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11885 (con'd)	**MALAYSIA** VOICE OF MALAYSIA Kajang	50kW::EAS
	ROMANIA RADIO BUCHAREST Bucharest	(J):250kW::AF
	USA RFE-RL Via Germany (FR)	100/250kW::WUSSR (D):100/250kW::WUSSR (J):100/250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(J):250kW::WUSSR (D):250kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::SA (D):100kW::CA
	USSR RADIO MOSCOW/RP&P Novosibirsk	(J):200kW:CHI,MONGOLIAN,ETC:EAS
	RADIO TIKHIY OKEAN Novosibirsk	(J):200kW:MARINERS:EAS/PAC
11890	**GERMANY (DR)** RADIO BERLIN INTL Königswusterhausen	100kW::WAF (J):100kW::WAF
	OMAN RADIO OMAN Sib	50kW:DS:ME/EAF (J):50kW:DS:ME/EAF
	USA VOICE OF AMERICA Cincinnati, Ohio	250kW::WAF M-F:250kW::WAF
	VOICE OF AMERICA Greenville, NC	500kW::CA
	USSR RADIO MOSCOW/RP&P Kingisepp	(J):240kW:RUSSIAN,URDU:SAS
	RADIO MOSCOW/RP&P Ryazan'	(D):240kW::EU/WAF (J):240kW:GREEK, ETC:EEU (D):240kW:VIETNAMESE, ETC:SEA
11895	**BRAZIL** RADIO PAMPA Pôrto Alegre	Irr::1kW:DS
	INDIA ALL INDIA RADIO Delhi	100kW::AS 100kW:DS 100kW:DS-ENGLISH, ETC
	IRAN VO THE ISLAMIC REP Tehrān	500kW::ME
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::SAS Sa:80kW::SAS
	USA RFE-RL Via Germany (FR)	(D):100/250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::EEU (J)M-F:50/250kW::EEU (J)Sa/Su:50/250kW::WUSSR
	VOICE OF AMERICA Greenville, NC	500kW::CA/SA
	VOICE OF AMERICA Via Philippines	(J):50kW::SEA
11900 (con'd)	**BULGARIA** RADIO SOFIA Rebrovo-Sofia	Su:250kW::WEU/NAF
	ECUADOR HCJB-VO THE ANDES Quito	100kW::SA

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11900 (con'd)	NORTHERN MARIANA IS KYOI Saipan Island	100kW:ENGLISH, JAPANESE:EAS (J):100kW:ENGLISH, JAPANESE:EAS
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::EAF
	SOUTH AFRICA RADIO RSA Meyerton	500kW::AF/EU 500kW::EAF/SAF 250kW::AF (D):500kW::AF/EU (D):500kW::EAF/SAF Su:500kW::EAF/SAF (D):500kW:DUTCH, GERMAN:AF/EU
	USA VOICE OF AMERICA Via Woofferton, UK	(J):250/300kW::WUSSR
	USSR 'RADIO MAGALLANES' Via Radio Moscow	(J):240kW::SA
	RADIO MOSCOW Komsomol'sk 'Amure	(D):100kW::PAC
	RADIO MOSCOW Tbilisi	(J):100kW:DS-2
	RADIO MOSCOW/RP&P Dushanbé	(J):240kW::SA (J):500kW::NAF/WAF (J):240kW::ME/NAF/WAF
	+RADIO MOSCOW/RP&P L'vov	(D):240kW:WS:EU
	RADIO TIKHIY OKEAN Komsomol'sk 'Amure	(D):100kW:MARINERS:PAC (D)Sa:100kW:MARINERS:PAC (D)Su-F:100kW:MARINERS:PAC
11905	ALBANIA RADIO TIRANA Lushnjë	100kW::AF
	CHINA (PR) RADIO BEIJING Baoding	120kW::ME/NAF/WAF (J):120kW::ME/NAF/WAF
	CHINA (TAIWAN) CENTRAL BC SYSTEM T'ai-pei	100kW:PRC-1 100kW:PRC-6
	EGYPT RADIO CAIRO Abu Za'bal	250kW:DS-VO THE ARABS:ME
	RADIO CAIRO Kafr Silim-Abis	250kW:DS-VO THE ARABS:EU
	GERMANY (FR) DEUTSCHE WELLE Jülich	(D):100kW::EEU
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::WUSSR (J):500kW::ME/SAS (J):500kW::NAF/ME
	DEUTSCHE WELLE Via Antigua	(J):250kW::SA
	DEUTSCHE WELLE Via Sines, Portugal	(J):250kW::EEU
	+DEUTSCHE WELLE Via Sri Lanka	(D):250kW::AF
	+DEUTSCHE WELLE Via Sri Lanka	(J):250kW::SEA
	ITALY RTV ITALIANA Rome	100kW::SA 100kW::WUSSR 100kW::SAS/SEA 100kW::WEU
(con'd)	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:M/Th:250kW::SAS/SEA

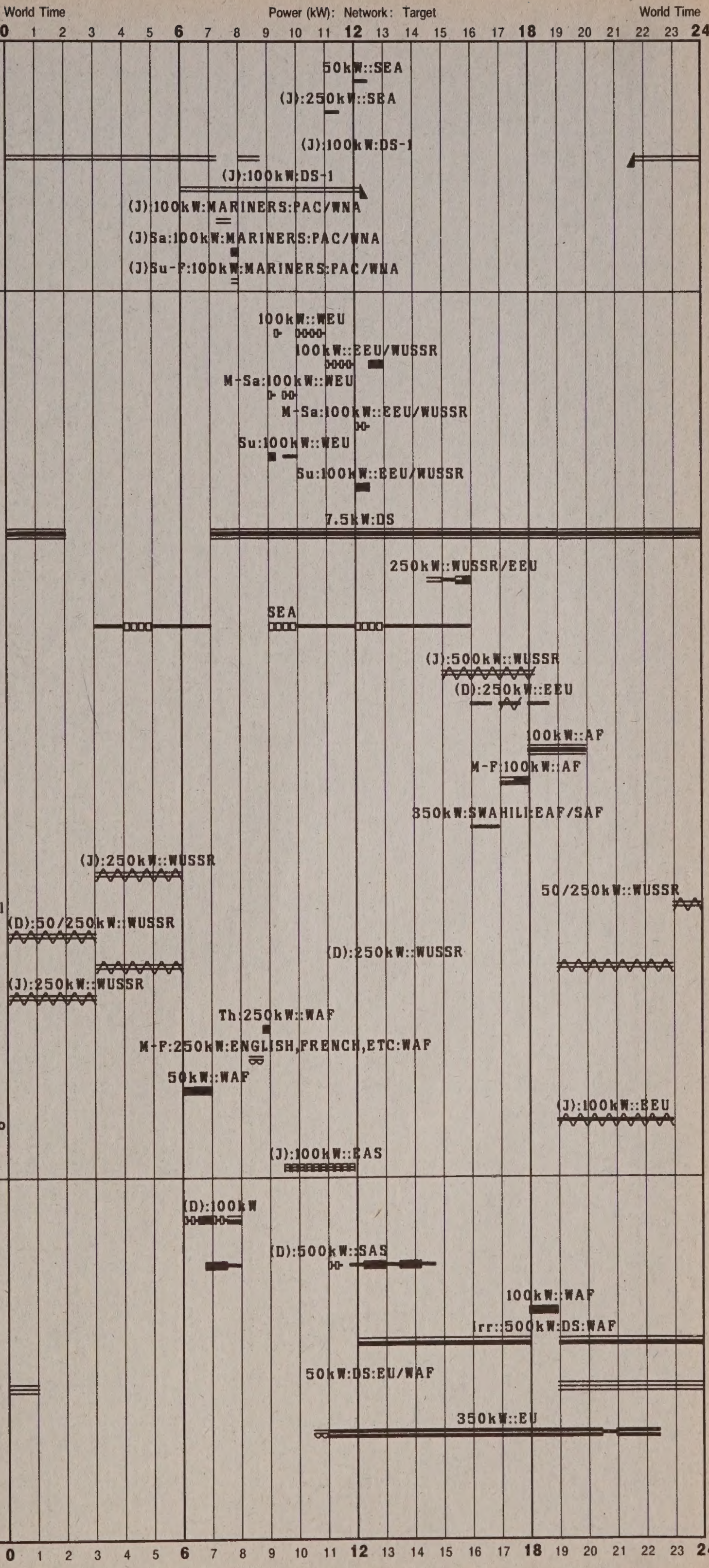
ENGLISH ▬ GERMAN / DEUTSCH ▭▭▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ☰
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ═ OTHER ─
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11905 (con'd)	SWITZERLAND	
	RED CROSS BC SVC Sottens	Irr:M/Th:500kW::ANZ
	SWISS RADIO INTL Schwarzenburg	250kW::SAS/SEA
		M-Sa:250kW::SAS/SEA
		Su:250kW::SAS/SEA
	SWISS RADIO INTL Sottens	500kW::ANZ
		M-Sa:500kW::ANZ
		Su:500kW::ANZ
	THAILAND	
	RADIO THAILAND Pathum Thani	50kW::SEA/EAS
		50kW::SEA/ENA
		Sa/Su:50kW::SEA/EAS
	USSR	
	RADIO MOSCOW/RP&P Frunze, Kirgiziya	(D):100kW::EAS
11905v	BRAZIL	
	RADIO UNIVERSO Curitiba	7.5kW:DS
11910	AUSTRALIA	
	RADIO AUSTRALIA Shepparton	100kW::EU/PAC
	ECUADOR	
	HCJB-VO THE ANDES Quito	100kW::AM
		100kW::CA/NA
		Alt 11775kHz:100kW::AM
		(D):100kW::NA/CA
	HUNGARY	
	RADIO BUDAPEST Erd-Diósd	100kW::WAF/SA/ANZ
		100kW::EU
		M-F:100kW::EU
		M-F:100kW::EAS/ANZ
		M-Sa:100kW::EU
		Sa:100kW::EU
		Sa/Su:100kW::EU
		Su:100kW::EU
		Su-F:100kW::EU
		Su/M/Th:100kW::EU
		Tu/F:100kW::EU
		W:100kW::EU
	RADIO BUDAPEST Jászberény	250kW::SA
		250kW::EU
		M:250kW::SA
		Sa-M/W/Th:250kW::EU
		Tu-Su:250kW::SA
		Tu/F:250kW::EU
	RADIO BUDAPEST Szekésfehérvár	20kW::NA
		M:20kW::NA
		Su-Tu/Th/F:20kW::NA
		Tu-Su:20kW::NA
		W/Sa:20kW::NA
	SAUDI ARABIA	
	BS OF THE KINGDOM Riyadh	350kW:SOMALI:EAF
	USA	
(con'd)	KCBI Dallas, Texas	50kW::ENA

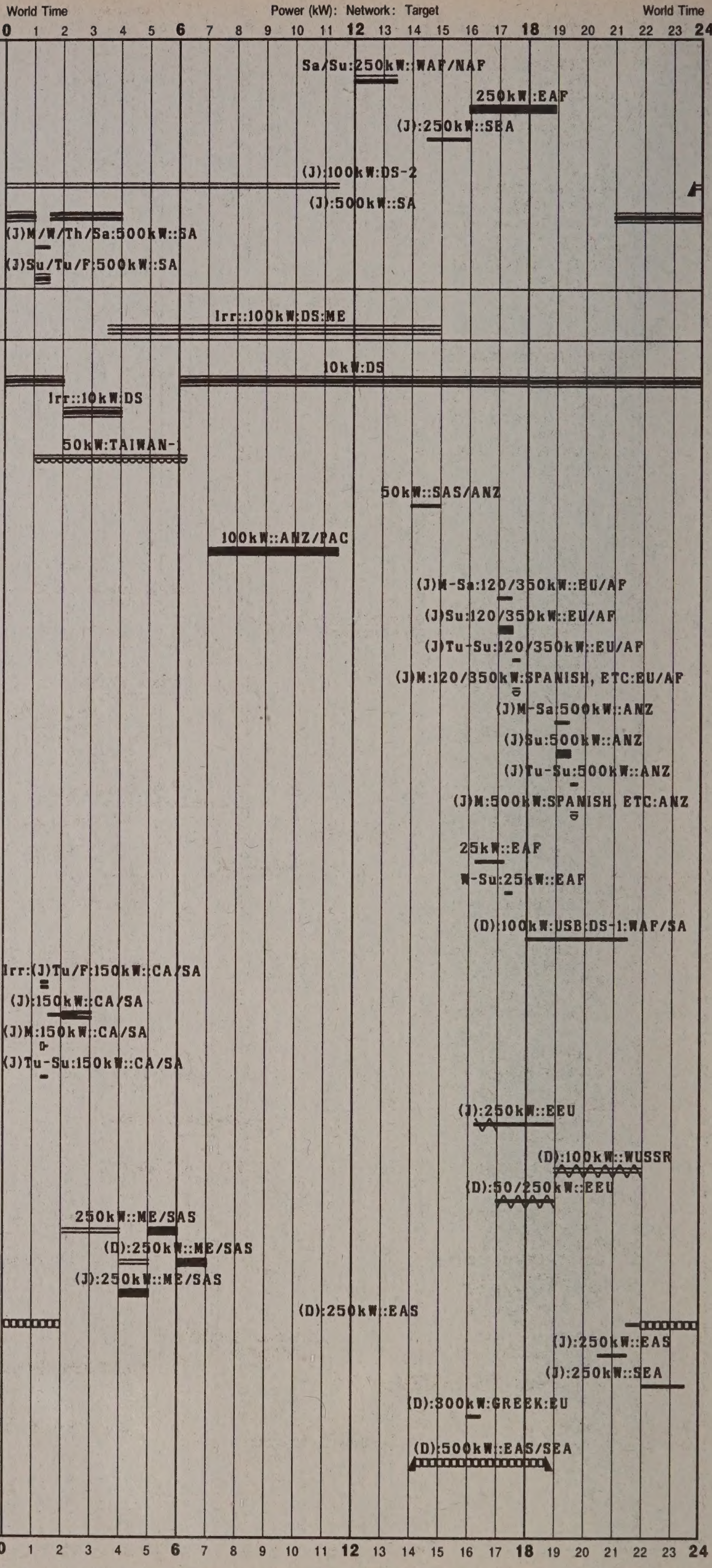
World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11910 (con'd)	USA VOICE OF AMERICA Via Philippines	50kW::SEA (J):250kW::SEA
	USSR RADIO MOSCOW Komsomol'sk 'Amure	(J):100kW:DS-1
	RADIO MOSCOW Moscow	(J):100kW:DS-1
	RADIO TIKHIY OKEAN Komsomol'sk 'Amure	(J):100kW:MARINERS:PAC/WNA (J)Sa:100kW:MARINERS:PAC/WNA (J)Su-F:100kW:MARINERS:PAC/WNA
11915	AUSTRIA RADIO AUSTRIA INTL Vienna	100kW::WEU 100kW::EEU/WUSSR M-Sa:100kW::WEU M-Sa:100kW::EEU/WUSSR Su:100kW::WEU Su:100kW::EEU/WUSSR
	BRAZIL RADIO GAUCHA Pôrto Alegre	7.5kW:DS
	CANADA RADIO CANADA INTL Via Sines, Portugal	250kW::WUSSR/EEU
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	SEA
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::WUSSR
	DEUTSCHE WELLE Via Sines, Portugal	(D):250kW::EEU
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	100kW::AF M-F:100kW::AF
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:SWAHILI:EAF/SAF
	USA RFE-RL Via Germany (FR)	(J):250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	50/250kW::WUSSR (D):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR (J):250kW::WUSSR
	VOICE OF AMERICA Greenville, NC	Th:250kW::WAF M-F:250kW:ENGLISH,FRENCH,ETC:WAF
	VOICE OF AMERICA Via M'rovia, Liberia	50kW::WAF
	VOICE OF AMERICA Via Tangier,Morocco	(J):100kW::EEU
	USSR RADIO MOSCOW/RP&P Petropavlovsk-Kam	(J):100kW::EAS
11920	AUSTRIA +RADIO AUSTRIA INTL Vienna	(D):100kW
	GERMANY (DR) RADIO BERLIN INTL Nauen	(D):500kW::SAS
	IVORY COAST RTV IVOIRIENNE Abidjan	100kW::WAF Irr::500kW:DS:WAF
	MOROCCO RTV MAROCAINE Tangier	50kW:DS:EU/WAF
(con'd)	SPAIN R EXTERIOR ESPANA Noblejas	350kW::EU



ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / ع ☰ RUSSIAN / РУССКИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11920 (con'd)	USA	
	VOICE OF AMERICA Via M'rovia, Liberia	Sa/Su:250kW::WAF/NAF
	VOICE OF AMERICA Via Philippines	250kW::EAF (J):250kW::SEA
	USSR	
	RADIO MOSCOW Novosibirsk	(J):100kW:DS-2
	RADIO MOSCOW/RP&P Tashkent	(J):500kW::SA (J)M/W/Th/Sa:500kW::SA (J)Su/Tu/F:500kW::SA
11920v	JORDAN	
	RADIO JORDAN 'Amman	Irr::100kW:DS:ME
11925	BRAZIL	
	RADIO BANDEIRANTES São Paulo	10kW:DS Irr::10kW:DS
	CHINA (PR)	
	CENTRAL PEOPLES BS Beijing	50kW:TAIWAN-1
	DENMARK	
	DANMARKS RADIO Copenhagen	50kW::SAS/ANZ
	ECUADOR	
	HCJB-VO THE ANDES Quito	100kW::ANZ/PAC
	NORWAY	
	RADIO NORWAY INTL Fredrikstad	(J)M-Sa:120/350kW::EU/AF (J)Su:120/350kW::EU/AF (J)Tu-Su:120/350kW::EU/AF (J)M:120/350kW:SPANISH, ETC:EU/AF
	RADIO NORWAY INTL Kvitsøy	(J)M-Sa:500kW::ANZ (J)Su:500kW::ANZ (J)Tu-Su:500kW::ANZ (J)M:500kW:SPANISH, ETC:ANZ
	SEYCHELLES	
	FAR EAST BC ASS'N North Pt, Mahé Is	25kW::EAF W-Su:25kW::EAF
	SWEDEN	
	SVERIGES RIKSRADIO Varberg	(D):100kW:USB:DS-1:WAF/SA
	SWITZERLAND	
	RED CROSS BC SVC Schwarzenburg	Irr:(J)Tu/F:150kW::CA/SA
	SWISS RADIO INTL Schwarzenburg	(J):150kW::CA/SA (J)M:150kW::CA/SA (J)Tu-Su:150kW::CA/SA
	UNITED KINGDOM	
	BBC Skelton, Cumbria	(J):250kW::EEU
	USA	
	RFE-RL Via Germany (FR)	(D):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU
	VOICE OF AMERICA Via Kavála, Greece	250kW::ME/SAS (D):250kW::ME/SAS (J):250kW::ME/SAS
	VOICE OF AMERICA Via Philippines	(D):250kW::EAS (J):250kW::EAS (J):250kW::SEA
	VOICE OF AMERICA Via Woofferton, UK	(D):300kW:GREEK:EU
	USSR	
	+RADIO MOSCOW/RP&P Krasnoyarsk	(D):500kW::EAS/SEA

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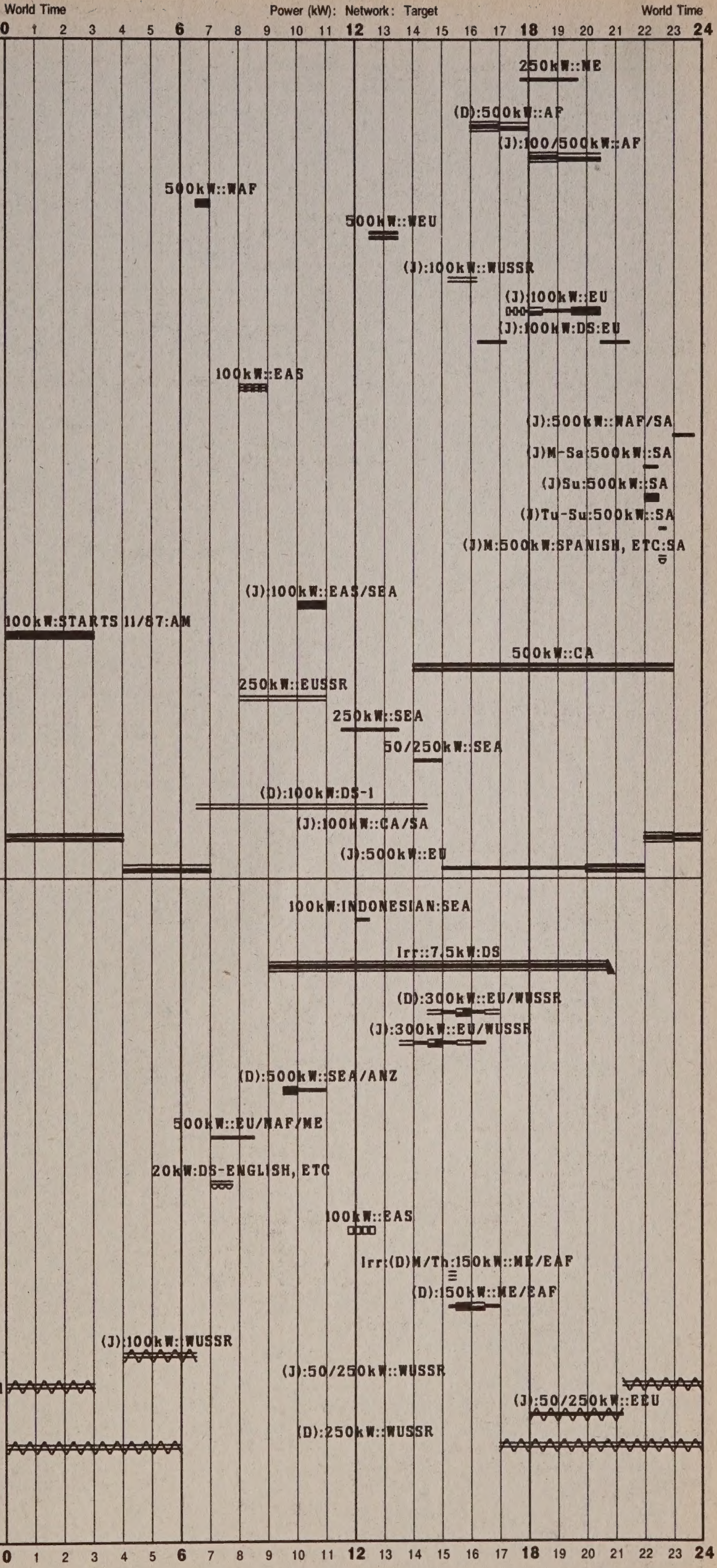
ARABIC / عربى ▬ RUSSIAN / РУССКИЙ ▬ CHINESE / 中文 ▬ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER ▬
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11930	EGYPT	
	RADIO CAIRO Kafr Silim-Abis	250kW::ME
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	(D):500kW::AF (J):100/500kW::AF
	HOLLAND	
	RADIO NEDERLAND Flevoland	500kW::WAF 500kW::WEU
	IRAN	
	VO THE ISLAMIC REP Tehrān	(J):100kW::WUSSR (J):100kW::EU (J):100kW:DS:EU
	NORTHERN MARIANA IS	
	KFBS-FAR EAST BC Saipan Island	100kW::EAS
	NORWAY	
	RADIO NORWAY INTL Kvitsøy	(J):500kW::WAF/SA
	RADIO NORWAY INTL Sveio	(J)M-Sa:500kW::SA (J)Su:500kW::SA (J)Tu-Su:500kW::SA (J)M:500kW:SPANISH, ETC:SA
	USA	
	KNLS-NEW LIFE STN Anchor Pt, Alaska	(J):100kW::EAS/SEA
	KUSW Salt Lake City,Utah	100kW:STARTS 11/87:AM
	RADIO MARTI Greenville, NC	500kW::CA
	VOICE OF AMERICA Via Philippines	250kW::EUSSR 250kW::SEA 50/250kW::SEA
	USSR	
	RADIO MOSCOW Armavir	(D):100kW:DS-1
	RADIO MOSCOW/RP&P Ashkhabad	(J):100kW::CA/SA (J):500kW::EU
11935	ALBANIA	
	RADIO TIRANA Lushnjë	100kW:INDONESIAN:SEA
	BRAZIL	
	R CLUBE PARANAENSE Curitiba	Irr::7.5kW:DS
	CANADA	
	RADIO CANADA INTL Via United Kingdom	(D):300kW::EU/WUSSR (J):300kW::EU/WUSSR
	FINLAND	
	RADIO FINLAND Pori	(D):500kW::SEA/ANZ
	HOLLAND	
	RADIO NEDERLAND Flevoland	500kW::EU/NAF/ME
	INDIA	
	ALL INDIA RADIO Delhi	20kW:DS-ENGLISH, ETC
	JAPAN	
	RADIO JAPAN/NHK Tōkyō-Yamata	100kW::EAS
	SWITZERLAND	
	RED CROSS BC SVC Schwarzenburg	Irr:(D)M/Th:150kW::ME/EAF
	SWISS RADIO INTL Schwarzenburg	(D):150kW::ME/EAF
	USA	
	RFE-RL Via Germany (FR)	(J):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR (J):50/250kW::EEU
(con'd)	RFE-RL Via Pals, Spain	(D):250kW::WUSSR



ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ═

ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ═ OTHER —

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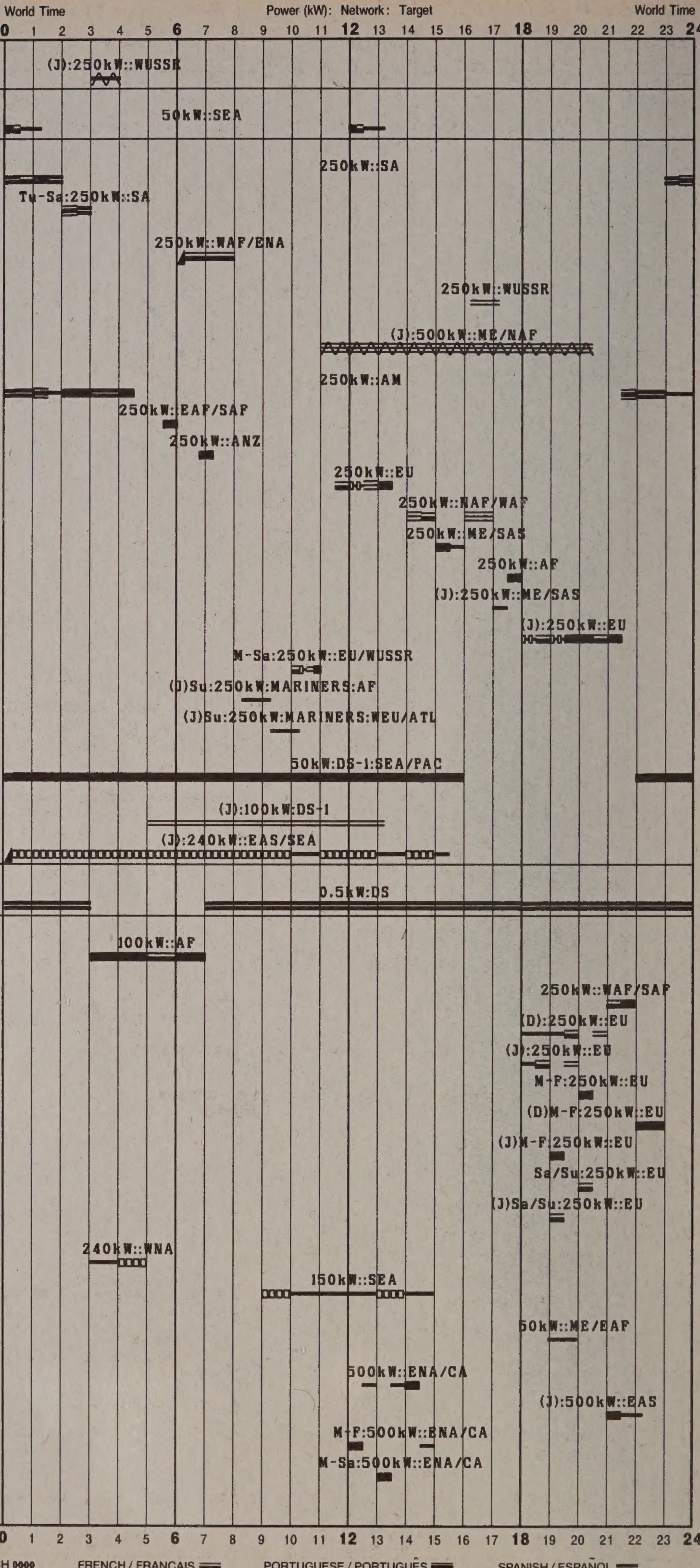

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11935 (con'd)	USA RFE-RL Via Pals, Spain	(J):250kW::WUSSR
11937.7	KAMPUCHEA (CAMBODIA) VO THE PEOPLE Phnom Penh	50kW::SEA
11940	CANADA RADIO CANADA INTL Sackville, NB	250kW::SA Tu-Sa:250kW::SA
	GABON AFRIQUE NUMERO UN Moanda-Moyabe	250kW::WAF/ENA
	INDIA ALL INDIA RADIO Aligarh	250kW::WUSSR
	IRAN VO THE ISLAMIC REP Tehrān	(J):500kW::ME/NAF
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AM 250kW::EAF/SAF 250kW::ANZ 250kW::EU 250kW::NAF/WAF 250kW::ME/SAS 250kW::AF (J):250kW::ME/SAS (J):250kW::EU M-Sa:250kW::EU/WUSSR (J)Su:250kW:MARINERS:AF (J)Su:250kW:MARINERS:WEU/ATL
	SINGAPORE SINGAPORE BC CORP Jurong	50kW:DS-1:SEA/PAC
	USSR RADIO MOSCOW Simferopol'	(J):100kW:DS-1
	RADIO MOSCOW/RP&P Blagoveshchensk	(J):240kW::EAS/SEA
11941v	PARAGUAY RADIO ENCARNACION Encarnación	0.5kW:DS
11945	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::AF
	CANADA RADIO CANADA INTL Sackville, NB	250kW::WAF/SAF (D):250kW::EU (J):250kW::EU M-F:250kW::EU (D)M-F:250kW::EU (J)M-F:250kW::EU Sa/Su:250kW::EU (J)Sa/Su:250kW::EU
	CHINA (PR) RADIO BEIJING Baoding	240kW::WNA
	RADIO BEIJING Xi'an	150kW::SEA
	DENMARK DANMARKS RADIO Copenhagen	50kW::ME/EAF
	FINLAND RADIO FINLAND Pori	500kW::ENA/CA (J):500kW::EAS M-F:500kW::ENA/CA M-Sa:500kW::ENA/CA
(con'd)		

ENGLISH ▬ GERMAN / DEUTSCH ▭▭▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
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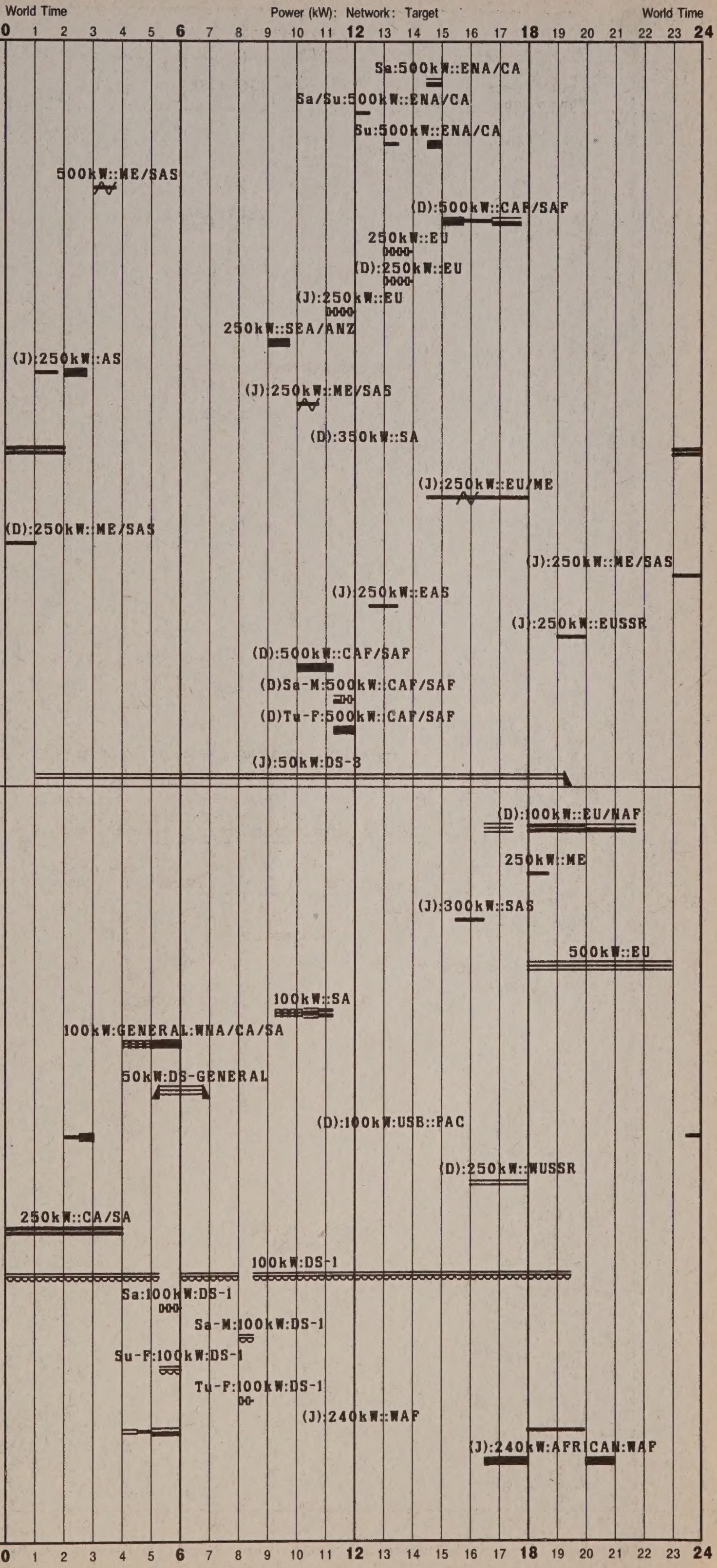
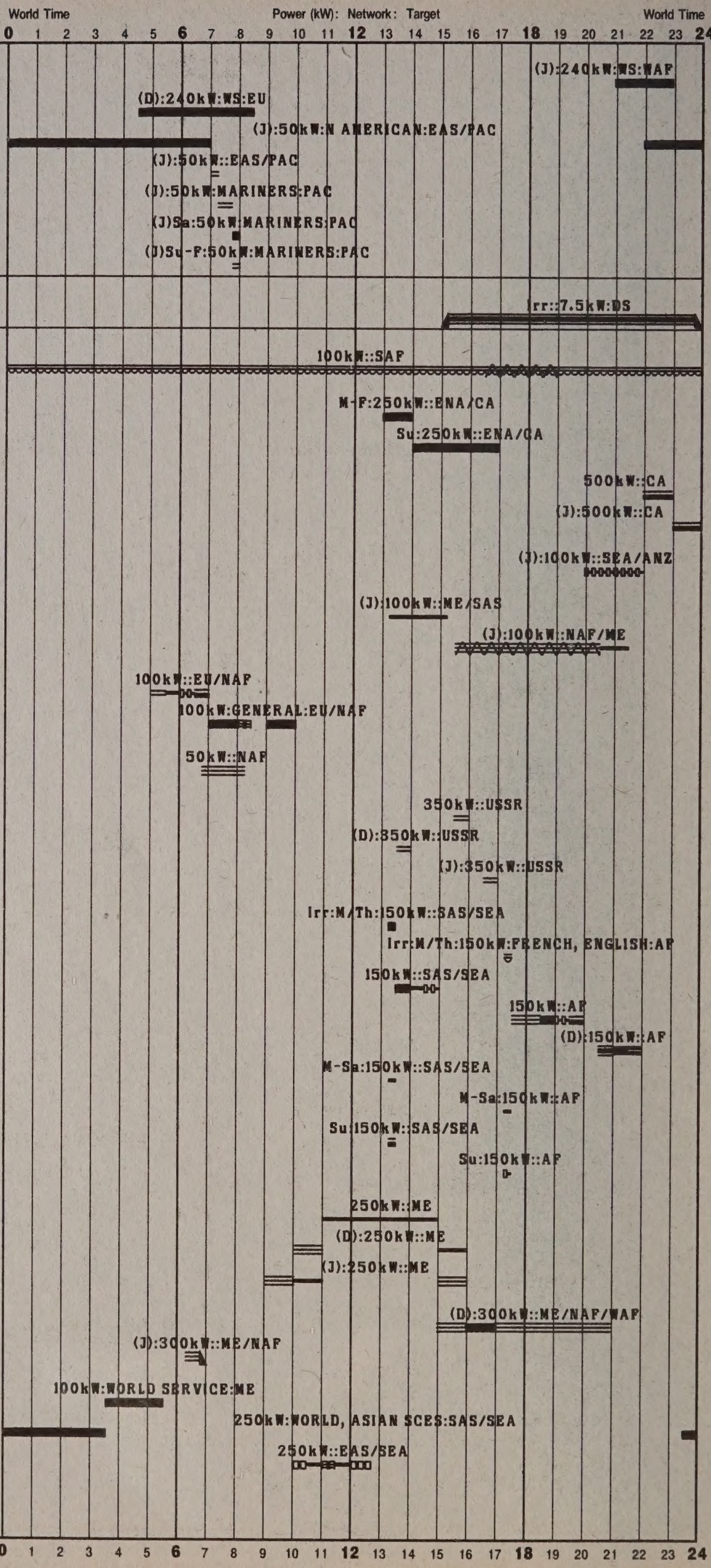
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11945 (con'd)	FINLAND RADIO FINLAND Pori	Sa:500kW::ENA/CA Sa/Su:500kW::ENA/CA Su:500kW::ENA/CA
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	500kW::ME/SAS (D):500kW::CAF/SAF
	DEUTSCHE WELLE Via Sines, Portugal	250kW::EU (D):250kW::EU (J):250kW::EU
	DEUTSCHE WELLE Via Sri Lanka	250kW::SEA/ANZ
	+DEUTSCHE WELLE Via Sri Lanka	(J):250kW::AS
	DEUTSCHE WELLE Via Sri Lanka	(J):250kW::ME/SAS
	SPAIN R EXTERIOR ESPANA Noblèjas	(D):350kW::SA
	UNITED KINGDOM BBC Skelton, Cumbria	(J):250kW::EU/ME
	USA VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::ME/SAS (J):250kW::ME/SAS
	VOICE OF AMERICA Via Philippines	(J):250kW::EAS (J):250kW::EUSSR
	WCSN Olamon, Maine	(D):500kW::CAF/SAF (D)Sa-M:500kW::CAF/SAF (D)Tu-F:500kW::CAF/SAF
	USSR RADIO MOSCOW Orcha	(J):50kW:DS-3
11950	CUBA RADIO HABANA Havana	(D):100kW::EU/NAF
	GERMANY (FR) DEUTSCHE WELLE Via Cyclops, Malta	250kW::ME
	HOLLAND RADIO NEDERLAND Via Madagascar	(J):300kW::SAS
	IRAQ RADIO BAGHDAD Balad-Salah el Deen	500kW::EU
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::SA 100kW:GENERAL:WNA/CA/SA
	SAUDI ARABIA BS OF THE KINGDOM Ad Dir'iyah	50kW:DS-GENERAL
	SWEDEN RADIO SWEDEN INTL Varberg	(D):100kW:USB::PAC
	UNITED KINGDOM BBC Via Zyyi, Cyprus	(D):250kW::WUSSR
	USA VOICE OF AMERICA Dixon, California	250kW::CA/SA
	USSR KAZAKH RADIO Alma-Ata	100kW:DS-1 Sa:100kW:DS-1 Sa-M:100kW:DS-1 Su-F:100kW:DS-1 Tu-F:100kW:DS-1
	RADIO MOSCOW/RP&P Khar'kov	(J):240kW::WAF (J):240kW:AFRICAN:WAF
(con'd)		



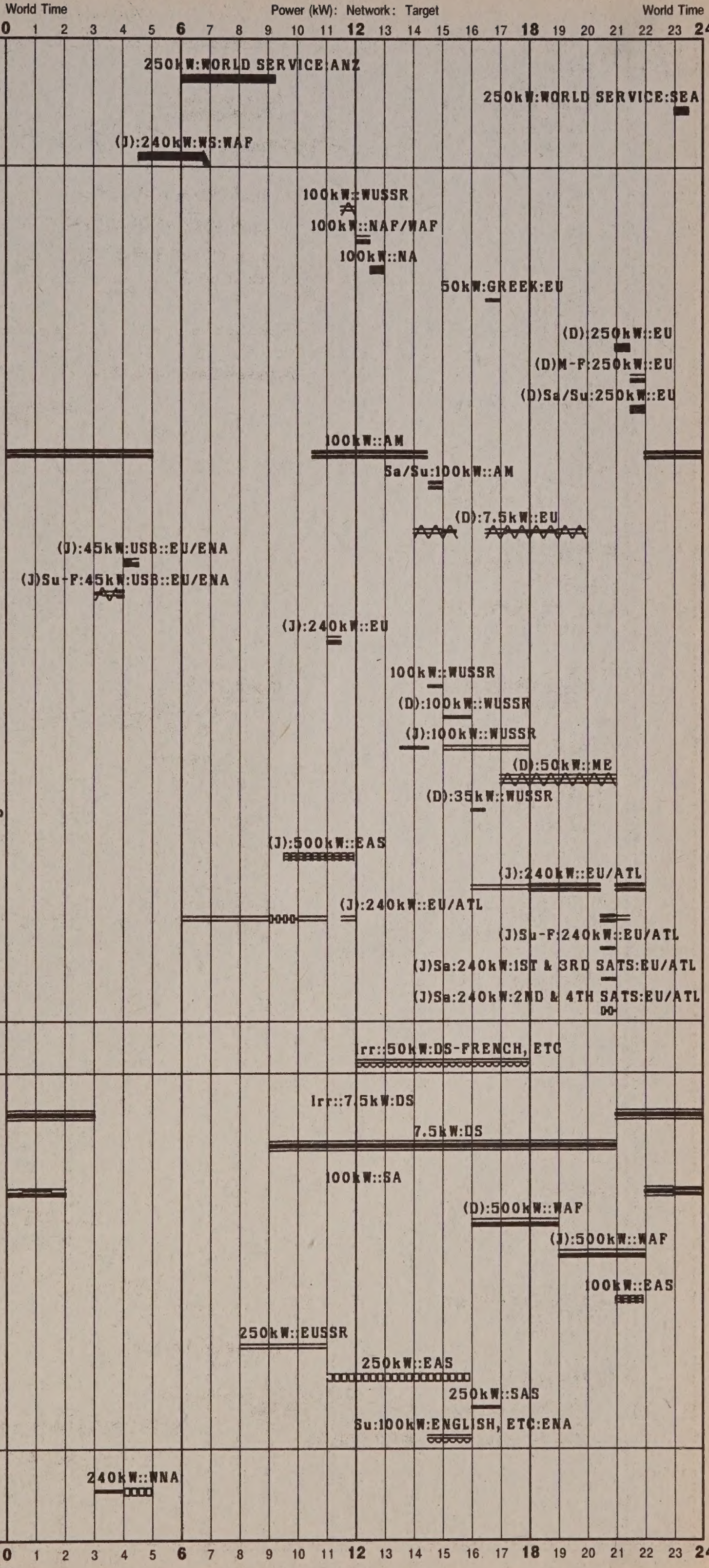
ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / PУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11950 (con'd)	USSR RADIO MOSCOW/RP&P Khar'kov	(J):240kW:WS:WAF
	+RADIO MOSCOW/RP&P Ul'yanovsk	(D):240kW:WS:EU
	RADIO MOSCOW/RP&P Vladivostok	(J):50kW:N AMERICAN:EAS/PAC (J):50kW::EAS/PAC
	RADIO TIKHIY OKEAN Vladivostok	(J):50kW:MARINERS:PAC (J)Sa:50kW:MARINERS:PAC (J)Su-F:50kW:MARINERS:PAC
11950v	BRAZIL RADIO MEC Rio de Janeiro	Irr::7.5kW:DS
11955	ANGOLA RADIO NACIONAL Luanda	100kW::SAF
	CANADA RADIO CANADA INTL Sackville, NB	M-F:250kW::ENA/CA Su:250kW::ENA/CA
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	500kW::CA (J):500kW::CA
	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::SEA/ANZ
	IRAN VO THE ISLAMIC REP Tehrān	(J):100kW::ME/SAS (J):100kW::NAF/ME
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::EU/NAF 100kW:GENERAL:EU/NAF
	LIBERIA RADIO ELWA Monrovia	50kW::NAF
	SWEDEN RADIO SWEDEN INTL Hörby	350kW::USSR (D):350kW::USSR (J):350kW::USSR
	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:M/Th:150kW::SAS/SEA Irr:M/Th:150kW:FRENCH, ENGLISH:AF
	SWISS RADIO INTL Schwarzenburg	150kW::SAS/SEA 150kW::AF (D):150kW::AF M-Sa:150kW::SAS/SEA M-Sa:150kW::AF Su:150kW::SAS/SEA Su:150kW::AF
	TURKEY TURKISH RTV CORP Ankara	250kW::ME (D):250kW::ME (J):250kW::ME
	UNITED ARAB EMIRATES UAE RADIO Dubai	(D):300kW::ME/NAF/WAF (J):300kW::ME/NAF
	UNITED KINGDOM BBC Via Maşirah, Oman	100kW:WORLD SERVICE:ME
	BBC Via Singapore	250kW:WORLD, ASIAN SCES:SAS/SEA 250kW::EAS/SEA
(con'd)		



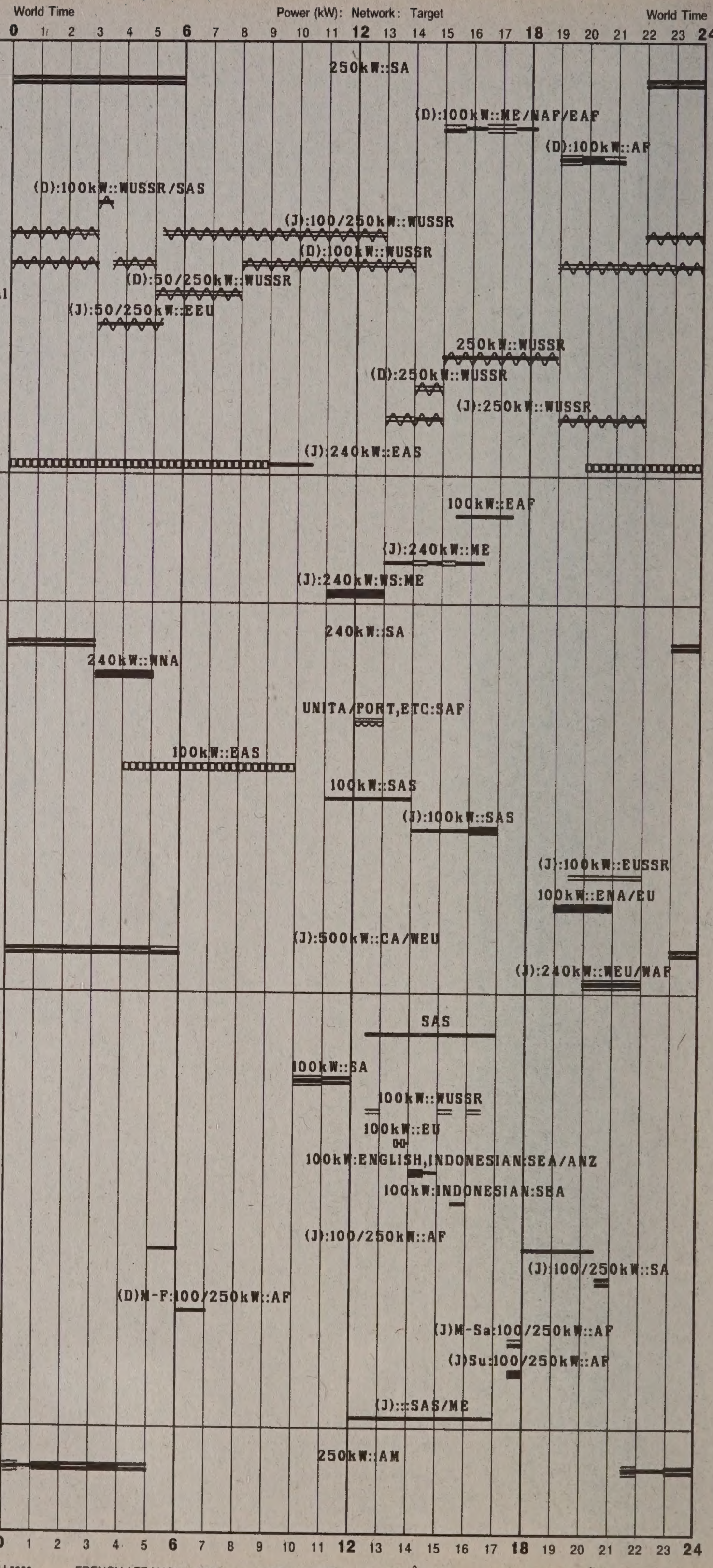
ENGLISH ▬ GERMAN / DEUTSCH ▬ FRENCH / FRANÇAIS ▬ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ▬ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11955 (con'd)	**UNITED KINGDOM** BBC Via Singapore	250kW:WORLD SERVICE:ANZ 250kW:WORLD SERVICE:SEA
	USSR RADIO MOSCOW/RP&P Ivano-Frankovsk	(J):240kW:WS:WAF
11960	**ALBANIA** RADIO TIRANA Lushnjë	100kW::WUSSR 100kW::NAF/WAF 100kW::NA 50kW:GREEK:EU
	CANADA RADIO CANADA INTL Sackville, NB	(D):250kW::EU (D)M-F:250kW::EU (D)Sa/Su:250kW::EU
	ECUADOR HCJB-VO THE ANDES Quito	100kW::AM Sa/Su:100kW::AM
	ISRAEL KOL ISRAEL Tel Aviv	(D):7.5kW::EU (J):45kW:USB::EU/ENA (J)Su-F:45kW:USB::EU/ENA
	LAOS LAO NATIONAL RADIO Via USSR	(J):240kW::EU
	USA VOICE OF AMERICA Via Ismaning, GFR	100kW::WUSSR (D):100kW::WUSSR (J):100kW::WUSSR
	VOICE OF AMERICA Via Rhodes, Greece	(D):50kW::ME
	VOICE OF AMERICA Via Tangier,Morocco	(D):35kW::WUSSR
	USSR RADIO MOSCOW/RP&P Krasnoyarsk	(J):500kW::EAS
	RADIO MOSCOW/RP&P Orcha	(J):240kW::EU/ATL
	RADIO MOSCOW/RP&P Serpukhov	(J):240kW::EU/ATL
	RS SOV BELORUSSIA Orcha	(J)Su-F:240kW::EU/ATL (J)Sa:240kW:1ST & 3RD SATS:EU/ATL (J)Sa:240kW:2ND & 4TH SATS:EU/ATL
11960v	**MALI** RTV MALIENNE Bamako	Irr::50kW:DS-FRENCH, ETC
11965	**BRAZIL** RADIO RECORD São Paulo	Irr::7.5kW:DS 7.5kW:DS
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::SA (D):500kW::WAF (J):500kW::WAF
	GUAM ADVENTIST WORLD R Agat	100kW::EAS
	USA VOICE OF AMERICA Via Philippines	250kW::EUSSR 250kW::EAS 250kW::SAS
	WRNO WORLDWIDE New Orleans, La	Su:100kW:ENGLISH, ETC:ENA
11970 (con'd)	**CHINA (PR)** RADIO BEIJING Baoding	240kW::WNA

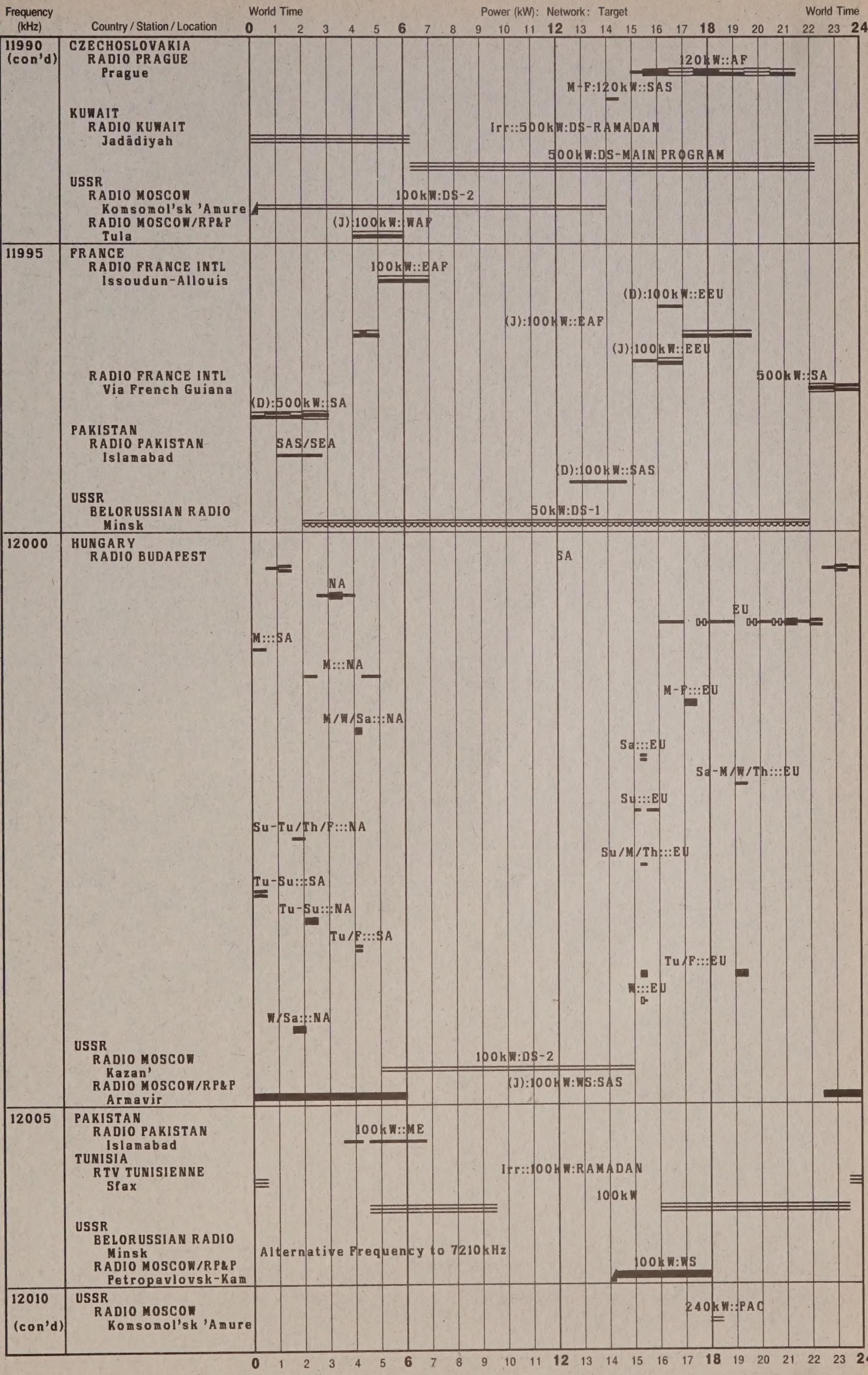


ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
ARABIC / عربى ═ RUSSIAN / PYCCKИИ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▭▭ MULTILINGUAL ▭▭ OTHER ─
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

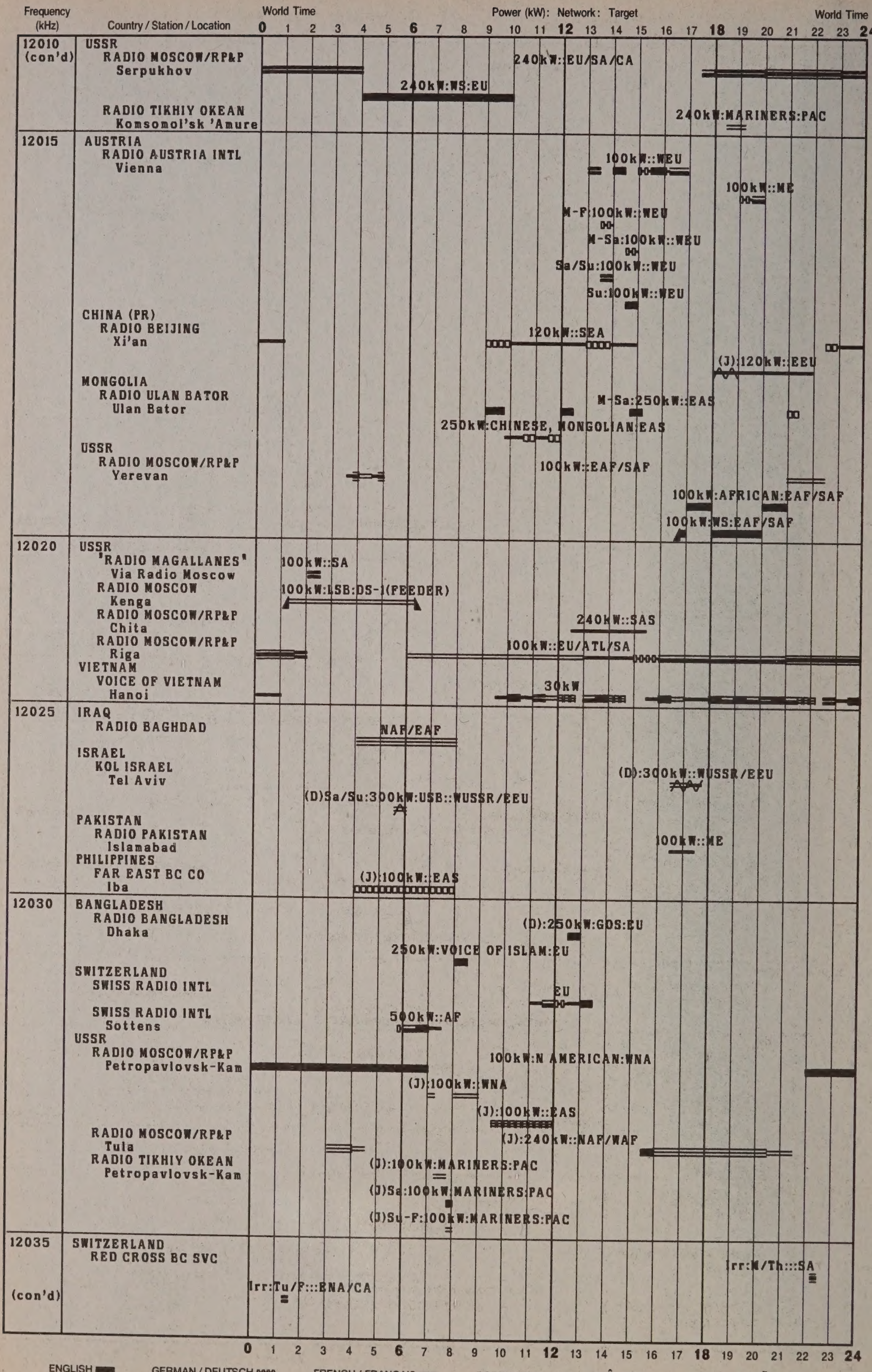
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
11970 (con'd)	**CUBA** RADIO HABANA Havana	250kW::SA
	GERMANY (DR) RADIO BERLIN INTL Leipzig	(D):100kW::ME/NAF/EAF (D):100kW::AF
	USA R FREE AFGHANISTAN Via Germany (FR)	(D):100kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	(J):100/250kW::WUSSR (D):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR (J):50/250kW::EEU
	RFE-RL Via Pals, Spain	250kW::WUSSR (D):250kW::WUSSR (J):250kW::WUSSR
	USSR RADIO MOSCOW/RP&P Irkutsk	(J):240kW::EAS
11975	**EGYPT** RADIO CAIRO Abu Za'bal	100kW::EAF
	USSR RADIO MOSCOW/RP&P Khar'kov	(J):240kW::ME (J):240kW:WS:ME
11980	**CHINA (PR)** RADIO BEIJING Baoding	240kW::SA 240kW::WNA
	CLANDESTINE (AFRICA) "AV DO GALO NEGRO"	UNITA/PORT,ETC:SAF
	GUAM ADVENTIST WORLD R Agat	100kW::EAS 100kW::SAS (J):100kW::SAS
	USA KNLS-NEW LIFE STN Anchor Pt, Alaska	(J):100kW::EUSSR
	WORLD HARVEST R Noblesville,Indiana	100kW::ENA/EU
	USSR RADIO MOSCOW/RP&P Tbilisi	(J):500kW::CA/WEU
	RADIO MOSCOW/RP&P Vinnitsa	(J):240kW::WEU/WAF
11985	**AFGHANISTAN** RADIO AFGHANISTAN Via USSR	SAS
	ALBANIA RADIO TIRANA Lushnjë	100kW::SA 100kW::WUSSR 100kW::EU 100kW:ENGLISH,INDONESIAN:SEA/ANZ
	+RADIO TIRANA Lushnjë	100kW:INDONESIAN:SEA
	BELGIUM BELGISCHE RADIO TV Wavre	(J):100/250kW::AF (J):100/250kW::SA (D)M-F:100/250kW::AF (J)M-Sa:100/250kW::AF (J)Su:100/250kW::AF
	USSR RADIO MOSCOW/RP&P	(J):::SAS/ME
11990 (con'd)	**CZECHOSLOVAKIA** RADIO PRAGUE Pieštány-Velké k'y	250kW::AM



ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ═ RUSSIAN / PYCCKИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



ENGLISH ▬ GERMAN / DEUTSCH ∞∞ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
ARABIC / عربي ≡ RUSSIAN / PYCCКИЙ = CHINESE / 中文 ▭ JAPANESE / 日本語 ▭ MULTILINGUAL ∞ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
12010 (con'd)	USSR RADIO MOSCOW/RP&P Serpukhov	240kW::EU/SA/CA 240kW:WS:EU
	RADIO TIKHIY OKEAN Komsomol'sk 'Amure	240kW:MARINERS:PAC
12015	AUSTRIA RADIO AUSTRIA INTL Vienna	100kW::WEU 100kW::ME M-F:100kW::WEU M-Sa:100kW::WEU Sa/Su:100kW::WEU Su:100kW::WEU
	CHINA (PR) RADIO BEIJING Xi'an	120kW::SEA (J):120kW::EEU
	MONGOLIA RADIO ULAN BATOR Ulan Bator	M-Sa:250kW::EAS 250kW:CHINESE, MONGOLIAN:EAS
	USSR RADIO MOSCOW/RP&P Yerevan	100kW::EAF/SAF 100kW:AFRICAN:EAF/SAF 100kW:WS:EAF/SAF
12020	USSR 'RADIO MAGALLANES' Via Radio Moscow	100kW::SA
	RADIO MOSCOW Kenga	100kW:LSB:DS-1(FEEDER)
	RADIO MOSCOW/RP&P Chita	240kW::SAS
	RADIO MOSCOW/RP&P Riga	100kW::EU/ATL/SA
	VIETNAM VOICE OF VIETNAM Hanoi	30kW
12025	IRAQ RADIO BAGHDAD	NAF/EAF
	ISRAEL KOL ISRAEL Tel Aviv	(D):300kW::WUSSR/EEU (D)Sa/Su:300kW:USB::WUSSR/EEU
	PAKISTAN RADIO PAKISTAN Islamabad	100kW::ME
	PHILIPPINES FAR EAST BC CO Iba	(J):100kW::EAS
12030	BANGLADESH RADIO BANGLADESH Dhaka	(D):250kW:GOS:EU 250kW:VOICE OF ISLAM:EU
	SWITZERLAND SWISS RADIO INTL	EU
	SWISS RADIO INTL Sottens	500kW::AF
	USSR RADIO MOSCOW/RP&P Petropavlovsk-Kam	100kW:N AMERICAN:WNA (J):100kW::WNA (J):100kW::EAS
	RADIO MOSCOW/RP&P Tula	(J):240kW::NAF/WAF
	RADIO TIKHIY OKEAN Petropavlovsk-Kam	(J):100kW:MARINERS:PAC (J)Sa:100kW:MARINERS:PAC (J)Su-F:100kW:MARINERS:PAC
12035 (con'd)	SWITZERLAND RED CROSS BC SVC	Irr:M/Th:::SA Irr:Tu/F:::ENA/CA

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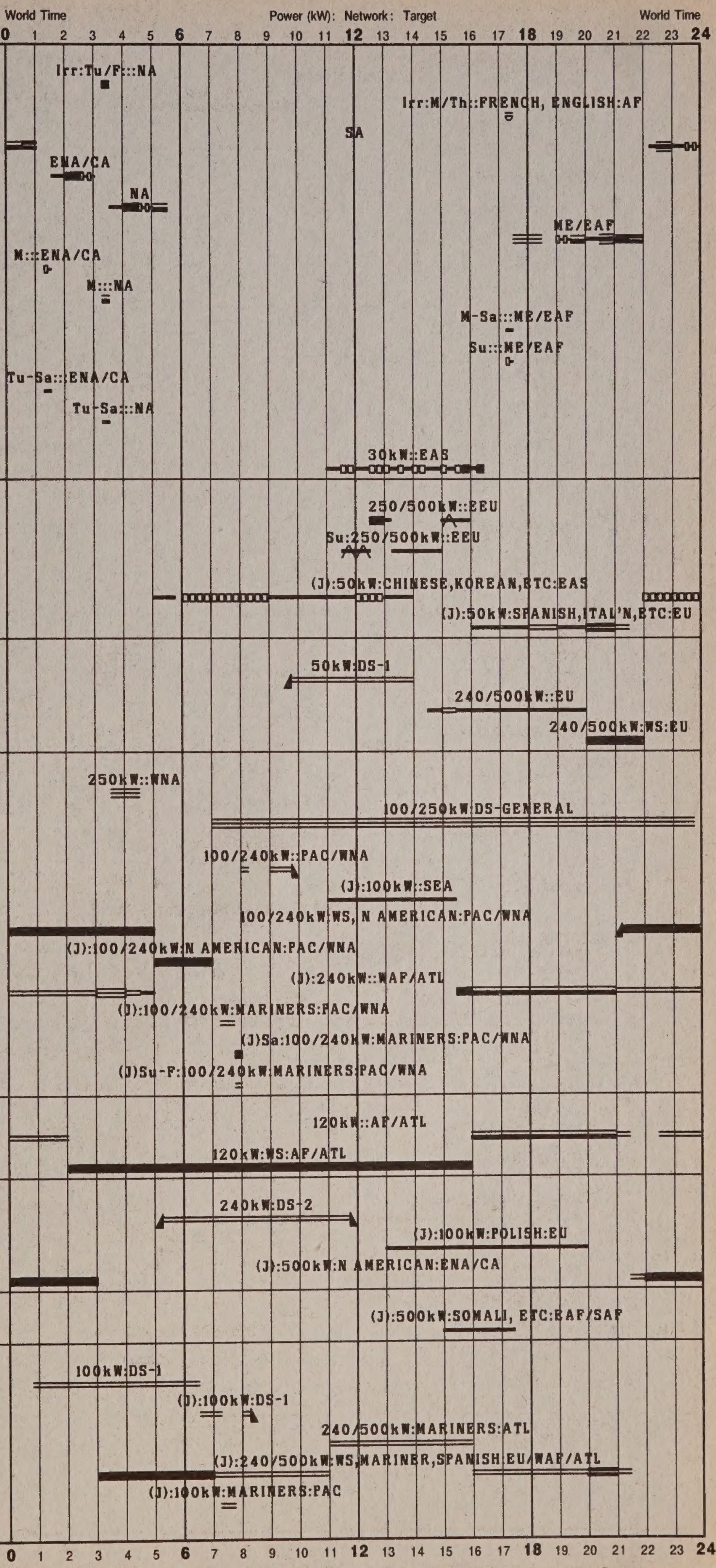
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
12035 (con'd)	**SWITZERLAND**	
	RED CROSS BC SVC	Irr:Tu/F::NA
		Irr:M/Th::FRENCH, ENGLISH:AF
	SWISS RADIO INTL	SA
		ENA/CA
		NA
		ME/EAF
		M::ENA/CA
		M:::NA
		M-Sa:::ME/EAF
		Su:::ME/EAF
		Tu-Sa:::ENA/CA
		Tu-Sa:::NA
	VIETNAM	
	VOICE OF VIETNAM Hanoi	30kW::EAS
12040	**UNITED KINGDOM**	
	BBC Various Locations	250/500kW::EEU
		Su:250/500kW::EEU
	USSR	
	RADIO MOSCOW/RP&P Sverdlovsk	(J):50kW:CHINESE,KOREAN,ETC:EAS
		(J):50kW:SPANISH,ITAL'N,ETC:EU
12045	**USSR**	
	RADIO MOSCOW Voronezh, RSFSR	50kW:DS-1
	RADIO MOSCOW/RP&P Kenga	240/500kW::EU
		240/500kW:WS:EU
12050	**EGYPT**	
	RADIO CAIRO Kafr Silim-Abis	250kW::WNA
	RADIO CAIRO Multiple Locations	100/250kW:DS-GENERAL
	USSR	
	RADIO MOSCOW Khabarovsk	100/240kW::PAC/WNA
	RADIO MOSCOW/RP&P Frunze, Kirgiziya	(J):100kW::SEA
	RADIO MOSCOW/RP&P Khabarovsk	100/240kW:WS, N AMERICAN:PAC/WNA
		(J):100/240kW:N AMERICAN:PAC/WNA
	RADIO MOSCOW/RP&P Tbilisi	(J):240kW::WAF/ATL
	RADIO TIKHIY OKEAN Khabarovsk	(J):100/240kW:MARINERS:PAC/WNA
		(J)Sa:100/240kW:MARINERS:PAC/WNA
		(J)Su-F:100/240kW:MARINERS:PAC/WNA
12055	**USSR**	
	RADIO MOSCOW/RP&P Armavir	120kW::AF/ATL
		120kW:WS:AF/ATL
12060	**USSR**	
	RADIO MOSCOW Voronezh, RSFSR	240kW:DS-2
	RADIO MOSCOW/RP&P Sverdlovsk	(J):100kW:POLISH:EU
	RADIO MOSCOW/RP&P Vinnitsa	(J):500kW:N AMERICAN:ENA/CA
12065	**USSR**	
	RADIO MOSCOW/RP&P Armavir	(J):500kW:SOMALI, ETC:EAF/SAF
12070	**USSR**	
	RADIO MOSCOW Khabarovsk	100kW:DS-1
		(J):100kW:DS-1
	RADIO MOSCOW/RP&P L'vov	240/500kW:MARINERS:ATL
		(J):240/500kW:WS,MARINER,SPANISH:EU/WAF/ATL
(con'd)	RADIO TIKHIY OKEAN Khabarovsk	(J):100kW:MARINERS:PAC



ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ▤
ARABIC / عربي ☰ RUSSIAN / PYCCKИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▤ MULTILINGUAL ▭ OTHER —
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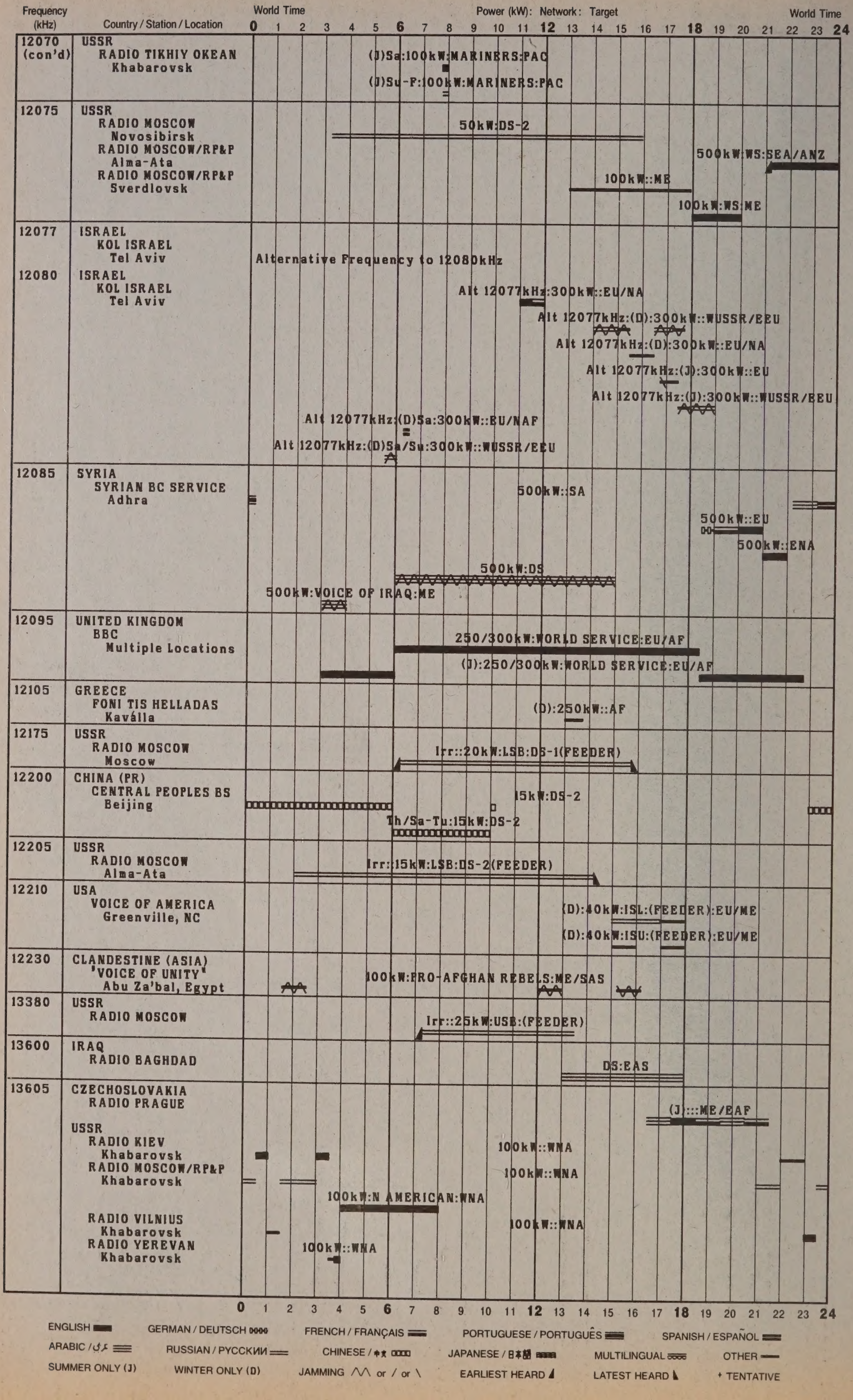
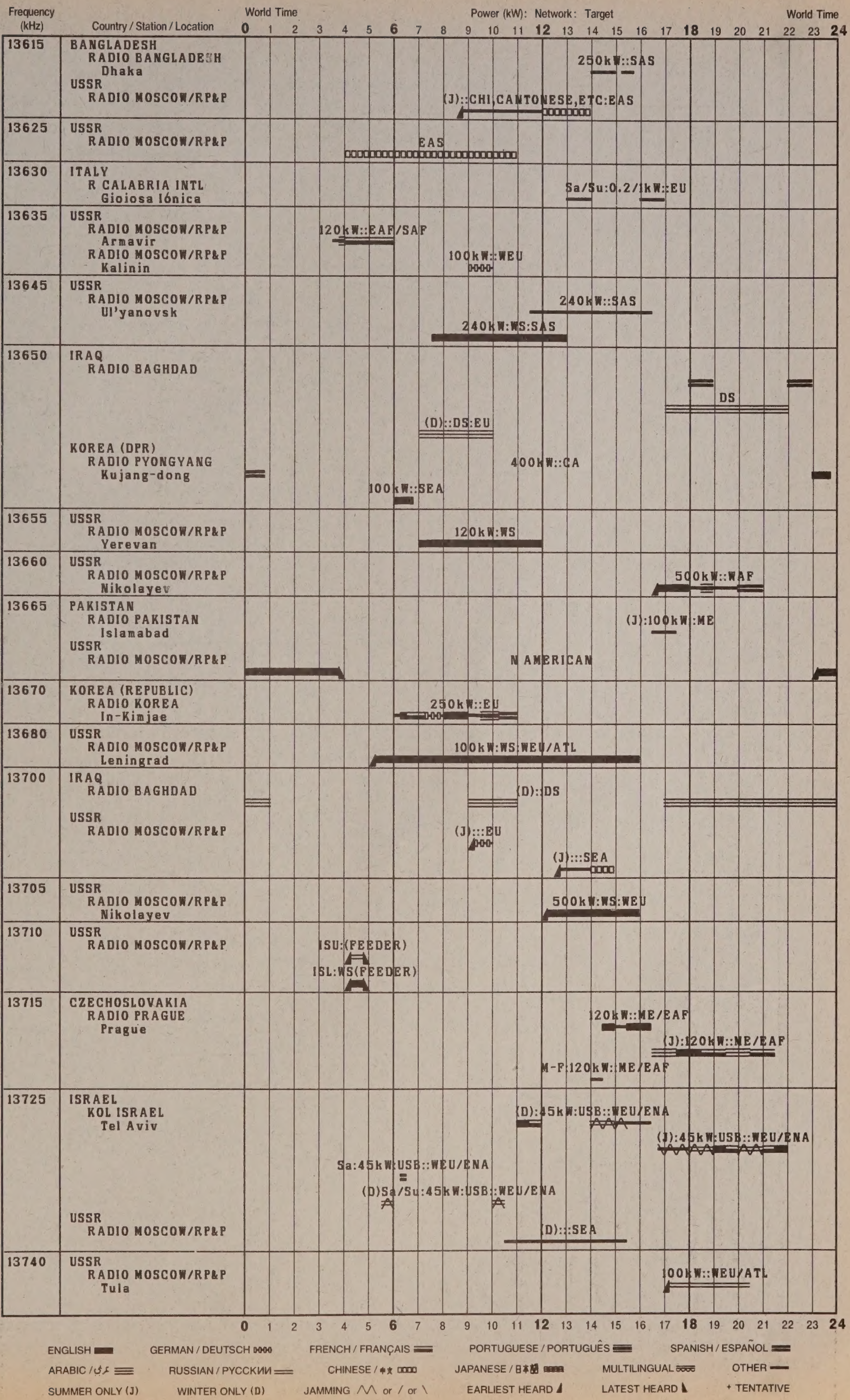
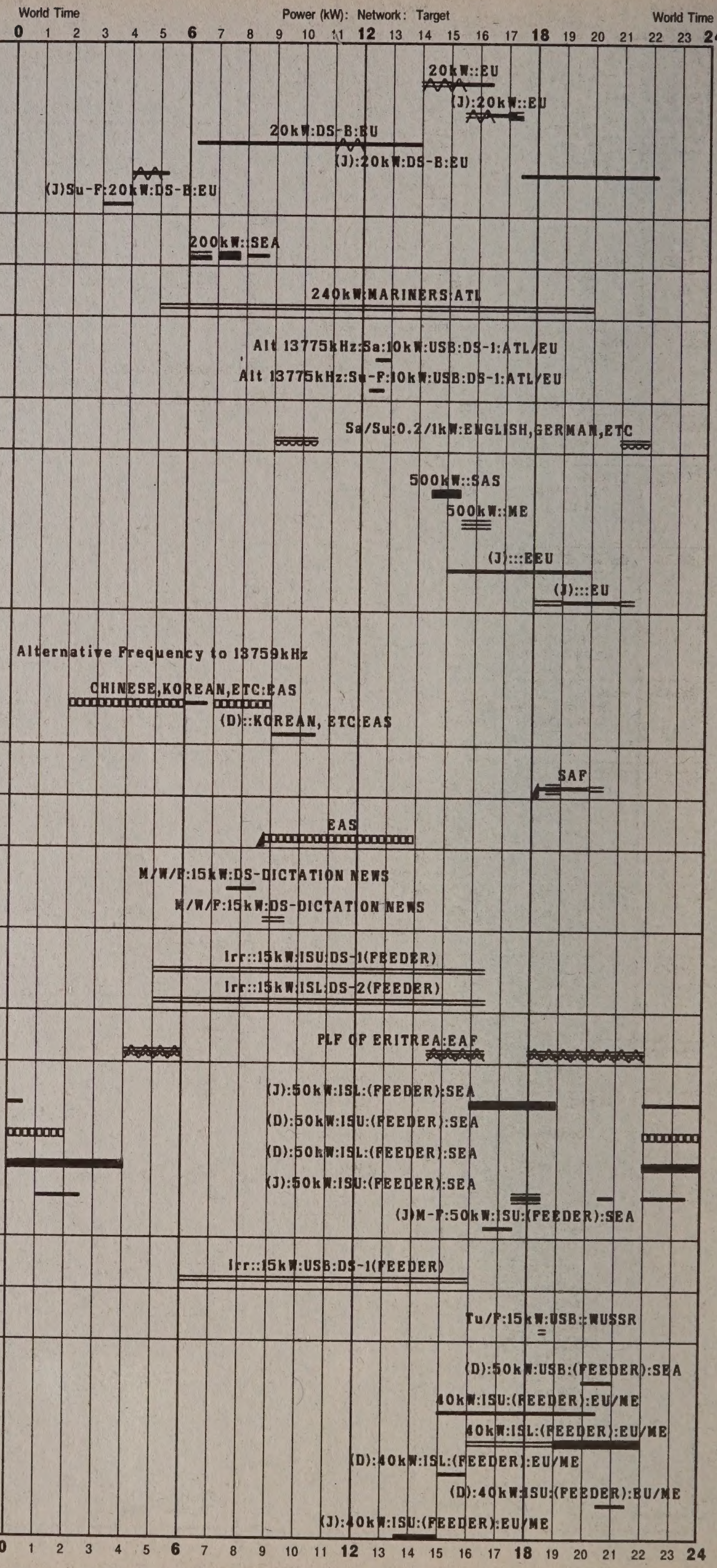

Frequency (kHz)
Country / Station / Location
World Time
Power (kW): Network: Target
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
12070 (con'd)
USSR
RADIO TIKHIY OKEAN
Khabarovsk
(J)Sa:100kW:MARINERS:PAC
(J)Su-F:100kW:MARINERS:PAC
12075
USSR
RADIO MOSCOW
Novosibirsk
RADIO MOSCOW/RP&P
Alma-Ata
RADIO MOSCOW/RP&P
Sverdlovsk
50kW:DS-2
500kW:WS:SEA/ANZ
100kW::ME
100kW:WS:ME
12077
ISRAEL
KOL ISRAEL
Tel Aviv
Alternative Frequency to 12080kHz
12080
ISRAEL
KOL ISRAEL
Tel Aviv
Alt 12077kHz:300kW::EU/NA
Alt 12077kHz:(D):300kW::WUSSR/EEU
Alt 12077kHz:(D):300kW::EU/NA
Alt 12077kHz:(J):300kW::EU
Alt 12077kHz:(J):300kW::WUSSR/EEU
Alt 12077kHz:(D)Sa:300kW::EU/NAF
Alt 12077kHz:(D)Sa/Su:300kW::WUSSR/EEU
12085
SYRIA
SYRIAN BC SERVICE
Adhra
500kW::SA
500kW::EU
500kW::ENA
500kW:DS
500kW:VOICE OF IRAQ:ME
12095
UNITED KINGDOM
BBC
Multiple Locations
250/300kW:WORLD SERVICE:EU/AF
(J):250/300kW:WORLD SERVICE:EU/AF
12105
GREECE
FONI TIS HELLADAS
Kavála
(D):250kW::AF
12175
USSR
RADIO MOSCOW
Moscow
Irr::20kW:LSB:DS-1(FEEDER)
12200
CHINA (PR)
CENTRAL PEOPLES BS
Beijing
15kW:DS-2
Th/Sa-Tu:15kW:DS-2
12205
USSR
RADIO MOSCOW
Alma-Ata
Irr::15kW:LSB:DS-2(FEEDER)
12210
USA
VOICE OF AMERICA
Greenville, NC
(D):40kW:ISL:(FEEDER):EU/ME
(D):40kW:ISU:(FEEDER):EU/ME
12230
CLANDESTINE (ASIA)
'VOICE OF UNITY'
Abu Za'bal, Egypt
100kW:PRO-AFGHAN REBELS:ME/SAS
13380
USSR
RADIO MOSCOW
Irr::25kW:USB:(FEEDER)
13600
IRAQ
RADIO BAGHDAD
DS:EAS
13605
CZECHOSLOVAKIA
RADIO PRAGUE
(J):::ME/EAF
USSR
RADIO KIEV
Khabarovsk
RADIO MOSCOW/RP&P
Khabarovsk
100kW::WNA
100kW::WNA
100kW:N AMERICAN:WNA
RADIO VILNIUS
Khabarovsk
RADIO YEREVAN
Khabarovsk
100kW::WNA
100kW::WNA
ENGLISH
GERMAN / DEUTSCH
FRENCH / FRANÇAIS
PORTUGUESE / PORTUGUÊS
SPANISH / ESPAÑOL
ARABIC / عربي
RUSSIAN / РУССКИЙ
CHINESE / 中文
JAPANESE / 日本語
MULTILINGUAL
OTHER
SUMMER ONLY (J)
WINTER ONLY (D)
JAMMING /\/\ or / or \
EARLIEST HEARD
LATEST HEARD
+ TENTATIVE

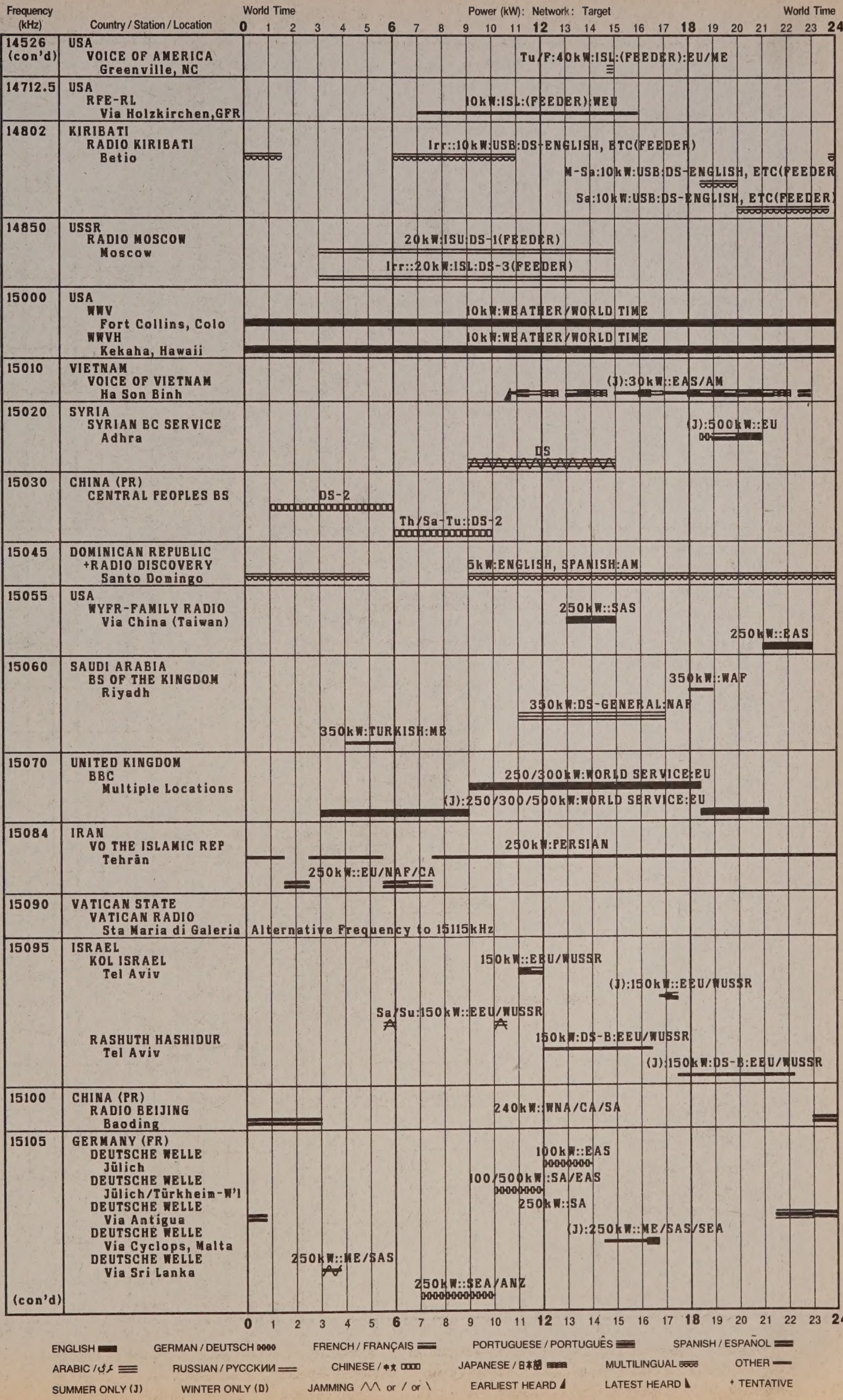

Frequency (kHz)
Country / Station / Location
World Time
Power (kW): Network: Target
World Time
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
13615
BANGLADESH
RADIO BANGLADESH
Dhaka
250kW::SAS
USSR
RADIO MOSCOW/RP&P
(J)::CHI,CANTONESE,ETC:EAS
13625
USSR
RADIO MOSCOW/RP&P
EAS
13630
ITALY
R CALABRIA INTL
Gioiosa Iónica
Sa/Su:0.2/1kW::EU
13635
USSR
RADIO MOSCOW/RP&P
Armavir
120kW::EAF/SAF
RADIO MOSCOW/RP&P
Kalinin
100kW::WEU
13645
USSR
RADIO MOSCOW/RP&P
Ul'yanovsk
240kW::SAS
240kW:WS:SAS
13650
IRAQ
RADIO BAGHDAD
DS
(D)::DS:EU
KOREA (DPR)
RADIO PYONGYANG
Kujang-dong
400kW::CA
100kW::SEA
13655
USSR
RADIO MOSCOW/RP&P
Yerevan
120kW:WS
13660
USSR
RADIO MOSCOW/RP&P
Nikolayev
500kW::WAF
13665
PAKISTAN
RADIO PAKISTAN
Islamabad
(J):100kW::ME
USSR
RADIO MOSCOW/RP&P
N AMERICAN
13670
KOREA (REPUBLIC)
RADIO KOREA
In-Kimjae
250kW::EU
13680
USSR
RADIO MOSCOW/RP&P
Leningrad
100kW:WS:WEU/ATL
13700
IRAQ
RADIO BAGHDAD
(D)::DS
USSR
RADIO MOSCOW/RP&P
(J):::EU
(J):::SEA
13705
USSR
RADIO MOSCOW/RP&P
Nikolayev
500kW:WS:WEU
13710
USSR
RADIO MOSCOW/RP&P
ISU:(FEEDER)
ISL:WS(FEEDER)
13715
CZECHOSLOVAKIA
RADIO PRAGUE
Prague
120kW::ME/EAF
(J):120kW::ME/EAF
M-F:120kW::ME/EAF
13725
ISRAEL
KOL ISRAEL
Tel Aviv
(D):45kW:USB::WEU/ENA
(J):45kW:USB::WEU/ENA
Sa:45kW:USB::WEU/ENA
(D)Sa/Su:45kW:USB::WEU/ENA
USSR
RADIO MOSCOW/RP&P
(D):::SEA
13740
USSR
RADIO MOSCOW/RP&P
Tula
100kW::WEU/ATL
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
ENGLISH
GERMAN / DEUTSCH
FRENCH / FRANÇAIS
PORTUGUESE / PORTUGUÊS
SPANISH / ESPAÑOL
ARABIC / عربي
RUSSIAN / PУCCKИЙ
CHINESE / 中文
JAPANESE / 日本語
MULTILINGUAL
OTHER
SUMMER ONLY (J)
WINTER ONLY (D)
JAMMING /\/\ or / or \
EARLIEST HEARD
LATEST HEARD
+ TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
13748	ISRAEL KOL ISRAEL Tel Aviv	20kW::EU (J):20kW::EU
	RASHUTH HASHIDUR Tel Aviv	20kW:DS-B:EU (J):20kW:DS-B:EU (J)Su-F:20kW:DS-B:EU
13750	KOREA (DPR) RADIO PYONGYANG Kujang-dong	200kW::SEA
13755	USSR RADIO MOSCOW Simferopol'	240kW:MARINERS:ATL
13759	ICELAND RIKISUTVARPID Reykjavik	Alt 13775kHz:Sa:10kW:USB:DS-1:ATL/EU Alt 13775kHz:Su-F:10kW:USB:DS-1:ATL/EU
13760	ITALY R CALABRIA INTL Gioiosa Iónica	Sa/Su:0.2/1kW:ENGLISH,GERMAN,ETC
13770	HOLLAND RADIO NEDERLAND Flevoland	500kW::SAS 500kW::ME
	USSR RADIO MOSCOW/RP&P	(J):::EEU (J):::EU
13775	ICELAND RIKISUTVARPID Reykjavik	Alternative Frequency to 13759kHz
	USSR RADIO MOSCOW/RP&P	CHINESE,KOREAN,ETC:EAS (D)::KOREAN, ETC:EAS
13780	USSR RADIO MOSCOW/RP&P	SAF
13785	USSR RADIO MOSCOW/RP&P	EAS
13810	USSR KAZAKH TELEGRAPH Alma-Ata	M/W/F:15kW:DS-DICTATION NEWS
	KAZAKH TELEGRAPH Alma-ata	M/W/F:15kW:DS-DICTATION NEWS
13820	USSR RADIO MOSCOW Moscow	Irr::15kW:ISU:DS-1(FEEDER) Irr::15kW:ISL:DS-2(FEEDER)
14325v	CLANDESTINE (AFRICA) 'VO BROAD MASSES' Argadom, Ethiopia	PLF OF ERITREA:EAF
14398	USA VOICE OF AMERICA Delano, California	(J):50kW:ISL:(FEEDER):SEA (D):50kW:ISU:(FEEDER):SEA (D):50kW:ISL:(FEEDER):SEA (J):50kW:ISU:(FEEDER):SEA (J)M-F:50kW:ISU:(FEEDER):SEA
14410	USSR RADIO MOSCOW Moscow	Irr::15kW:USB:DS-1(FEEDER)
14500	UNITED NATIONS UNITED NATIONS R Via Switzerland	Tu/F:15kW:USB::WUSSR
14526	USA VOICE OF AMERICA Delano, California	(D):50kW:USB:(FEEDER):SEA
	VOICE OF AMERICA Greenville, NC	40kW:ISU:(FEEDER):EU/ME 40kW:ISL:(FEEDER):EU/ME (D):40kW:ISL:(FEEDER):EU/ME (D):40kW:ISU:(FEEDER):EU/ME (J):40kW:ISU:(FEEDER):EU/ME

(con'd)

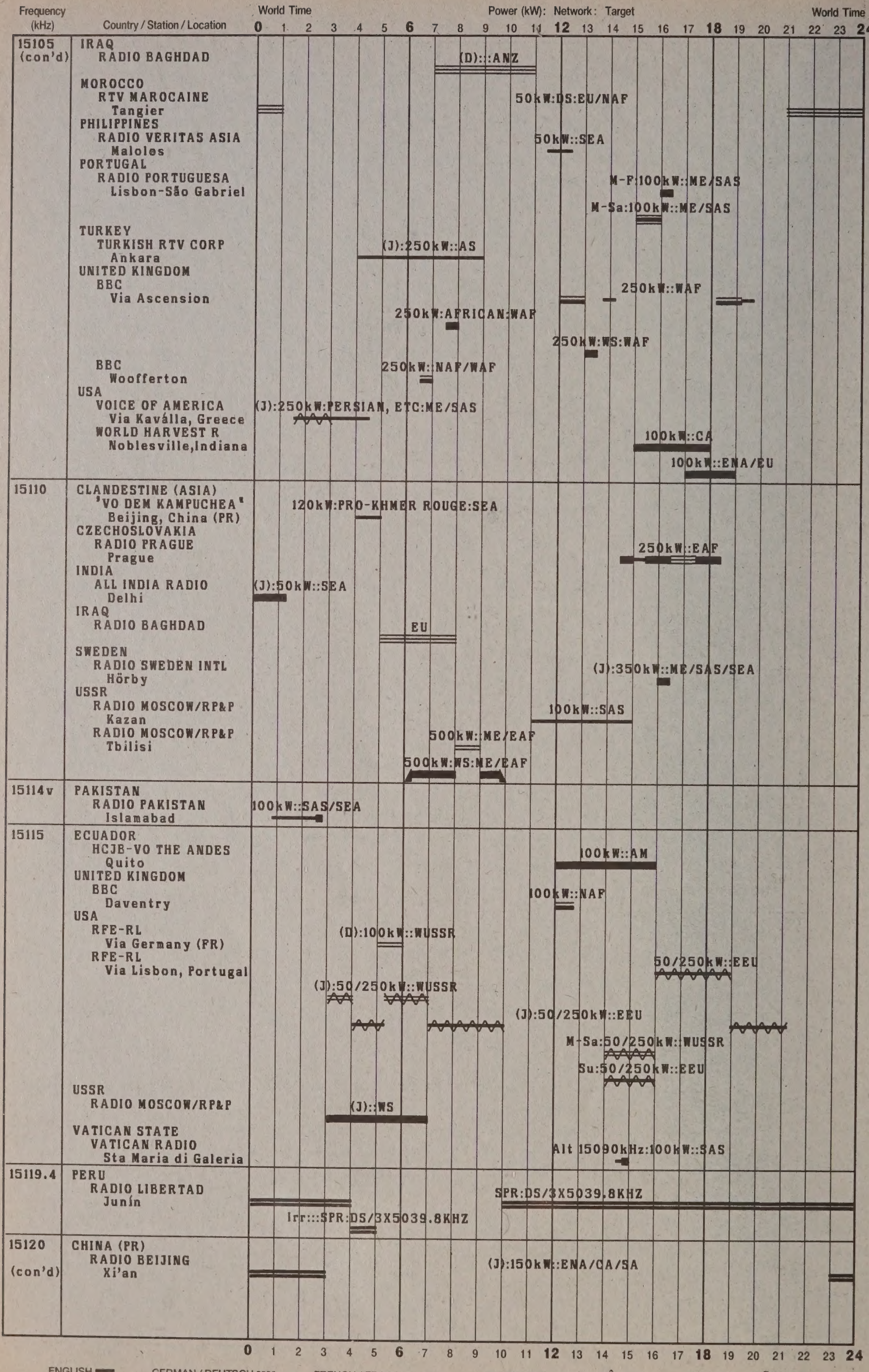


ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ☰ SPANISH / ESPAÑOL ☰
ARABIC / عربي ☰ RUSSIAN / PYCCKИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▭ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	World Time · Power (kW): Network: Target
14526 (con'd)	USA VOICE OF AMERICA Greenville, NC	Tu/F:40kW:ISL:(FEEDER):EU/ME
14712.5	USA RFE-RL Via Holzkirchen,GFR	10kW:ISL:(FEEDER):WEU
14802	KIRIBATI RADIO KIRIBATI Betio	Irr::10kW:USB:DS-ENGLISH, ETC(FEEDER) M-Sa:10kW:USB:DS-ENGLISH, ETC(FEEDER) Sa:10kW:USB:DS-ENGLISH, ETC(FEEDER)
14850	USSR RADIO MOSCOW Moscow	20kW:ISU:DS-1(FEEDER) Irr::20kW:ISL:DS-3(FEEDER)
15000	USA WWV Fort Collins, Colo WWVH Kekaha, Hawaii	10kW:WEATHER/WORLD TIME 10kW:WEATHER/WORLD TIME
15010	VIETNAM VOICE OF VIETNAM Ha Son Binh	(J):30kW::EAS/AM
15020	SYRIA SYRIAN BC SERVICE Adhra	(J):500kW::EU DS
15030	CHINA (PR) CENTRAL PEOPLES BS	DS-2 Th/Sa-Tu::DS-2
15045	DOMINICAN REPUBLIC +RADIO DISCOVERY Santo Domingo	5kW:ENGLISH, SPANISH:AM
15055	USA WYFR-FAMILY RADIO Via China (Taiwan)	250kW::SAS 250kW::EAS
15060	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW::WAF 350kW:DS-GENERAL:NAF 350kW:TURKISH:ME
15070	UNITED KINGDOM BBC Multiple Locations	250/300kW:WORLD SERVICE:EU (J):250/300/500kW:WORLD SERVICE:EU
15084	IRAN VO THE ISLAMIC REP Tehrān	250kW:PERSIAN 250kW::EU/NAF/CA
15090	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	Alternative Frequency to 15115kHz
15095	ISRAEL KOL ISRAEL Tel Aviv RASHUTH HASHIDUR Tel Aviv	150kW::EEU/WUSSR (J):150kW::EEU/WUSSR Sa/Su:150kW::EEU/WUSSR 150kW:DS-B:EEU/WUSSR (J):150kW:DS-B:EEU/WUSSR
15100	CHINA (PR) RADIO BEIJING Baoding	240kW::WNA/CA/SA
15105 (con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich DEUTSCHE WELLE Jülich/Türkheim-W'l DEUTSCHE WELLE Via Antigua DEUTSCHE WELLE Via Cyclops, Malta DEUTSCHE WELLE Via Sri Lanka	100kW::EAS 100/500kW::SA/EAS 250kW::SA (J):250kW::ME/SAS/SEA 250kW::ME/SAS 250kW::SEA/ANZ

ENGLISH ▬ GERMAN / DEUTSCH ▬ FRENCH / FRANÇAIS ▬ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ▬ RUSSIAN / РУССКИИ ▬ CHINESE / 中文 ▬ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER ▬
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15105 (con'd)	IRAQ RADIO BAGHDAD	(D):::ANZ
	MOROCCO RTV MAROCAINE Tangier	50kW:DS:EU/NAF
	PHILIPPINES RADIO VERITAS ASIA Maloles	50kW::SEA
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	M-F:100kW::ME/SAS M-Sa:100kW::ME/SAS
	TURKEY TURKISH RTV CORP Ankara	(J):250kW::AS
	UNITED KINGDOM BBC Via Ascension	250kW::WAF 250kW:AFRICAN:WAF 250kW:WS:WAF
	BBC Woofferton	250kW::NAF/WAF
	USA VOICE OF AMERICA Via Kaválla, Greece	(J):250kW:PERSIAN, ETC:ME/SAS
	WORLD HARVEST R Noblesville,Indiana	100kW::CA 100kW::ENA/EU
15110	CLANDESTINE (ASIA) 'VO DEM KAMPUCHEA' Beijing, China (PR)	120kW:PRO-KHMER ROUGE:SEA
	CZECHOSLOVAKIA RADIO PRAGUE Prague	250kW::EAF
	INDIA ALL INDIA RADIO Delhi	(J):50kW::SEA
	IRAQ RADIO BAGHDAD	EU
	SWEDEN RADIO SWEDEN INTL Hörby	(J):350kW::ME/SAS/SEA
	USSR RADIO MOSCOW/RP&P Kazan	100kW::SAS
	RADIO MOSCOW/RP&P Tbilisi	500kW::ME/EAF 500kW:WS:ME/EAF
15114v	PAKISTAN RADIO PAKISTAN Islamabad	100kW::SAS/SEA
15115	ECUADOR HCJB-VO THE ANDES Quito	100kW::AM
	UNITED KINGDOM BBC Daventry	100kW::NAF
	USA RFE-RL Via Germany (FR)	(D):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::WUSSR (J):50/250kW::EEU M-Sa:50/250kW::WUSSR Su:50/250kW::EEU
	USSR RADIO MOSCOW/RP&P	(J)::WS
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	Alt 15090kHz:100kW::SAS
15119.4	PERU RADIO LIBERTAD Junín	SPR:DS/3X5039.8KHZ Irr:::SPR:DS/3X5039.8KHZ
15120 (con'd)	CHINA (PR) RADIO BEIJING Xi'an	(J):150kW::ENA/CA/SA

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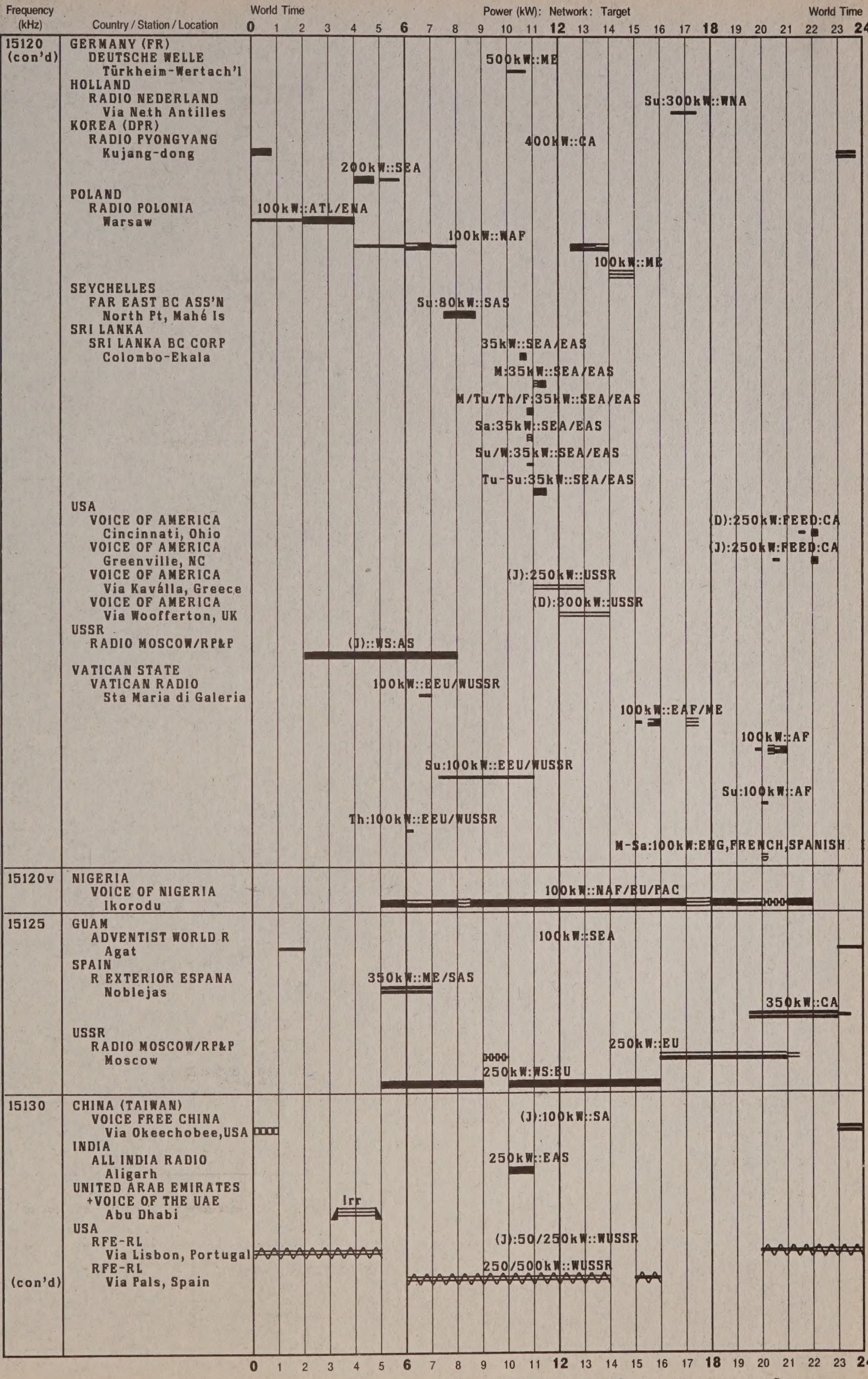

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15120 (con'd)	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	500kW::ME
	HOLLAND RADIO NEDERLAND Via Neth Antilles	Su:300kW::WNA
	KOREA (DPR) RADIO PYONGYANG Kujang-dong	400kW::CA 200kW::SEA
	POLAND RADIO POLONIA Warsaw	100kW::ATL/ENA 100kW::WAF 100kW::ME
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	Su:80kW::SAS
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	35kW::SEA/EAS M:35kW::SEA/EAS M/Tu/Th/F:35kW::SEA/EAS Sa:35kW::SEA/EAS Su/W:35kW::SEA/EAS Tu-Su:35kW::SEA/EAS
	USA VOICE OF AMERICA Cincinnati, Ohio	(D):250kW:FEED:CA
	VOICE OF AMERICA Greenville, NC	(J):250kW:FEED:CA
	VOICE OF AMERICA Via Kavâlla, Greece	(J):250kW::USSR
	VOICE OF AMERICA Via Woofferton, UK	(D):300kW::USSR
	USSR RADIO MOSCOW/RP&P	(J)::WS:AS
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EEU/WUSSR 100kW::EAF/ME 100kW::AF Su:100kW::EEU/WUSSR Su:100kW::AF Th:100kW::EEU/WUSSR M-Sa:100kW:ENG,FRENCH,SPANISH
15120v	NIGERIA VOICE OF NIGERIA Ikorodu	100kW::NAF/EU/PAC
15125	GUAM ADVENTIST WORLD R Agat	100kW::SEA
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::ME/SAS 350kW::CA
	USSR RADIO MOSCOW/RP&P Moscow	250kW::EU 250kW:WS:EU
15130	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(J):100kW::SA
	INDIA ALL INDIA RADIO Aligarh	250kW::EAS
	UNITED ARAB EMIRATES +VOICE OF THE UAE Abu Dhabi	Irr
	USA RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR
(con'd)	RFE-RL Via Pals, Spain	250/500kW::WUSSR

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ARABIC / عربي ≡ RUSSIAN / РУССКИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ═ OTHER —
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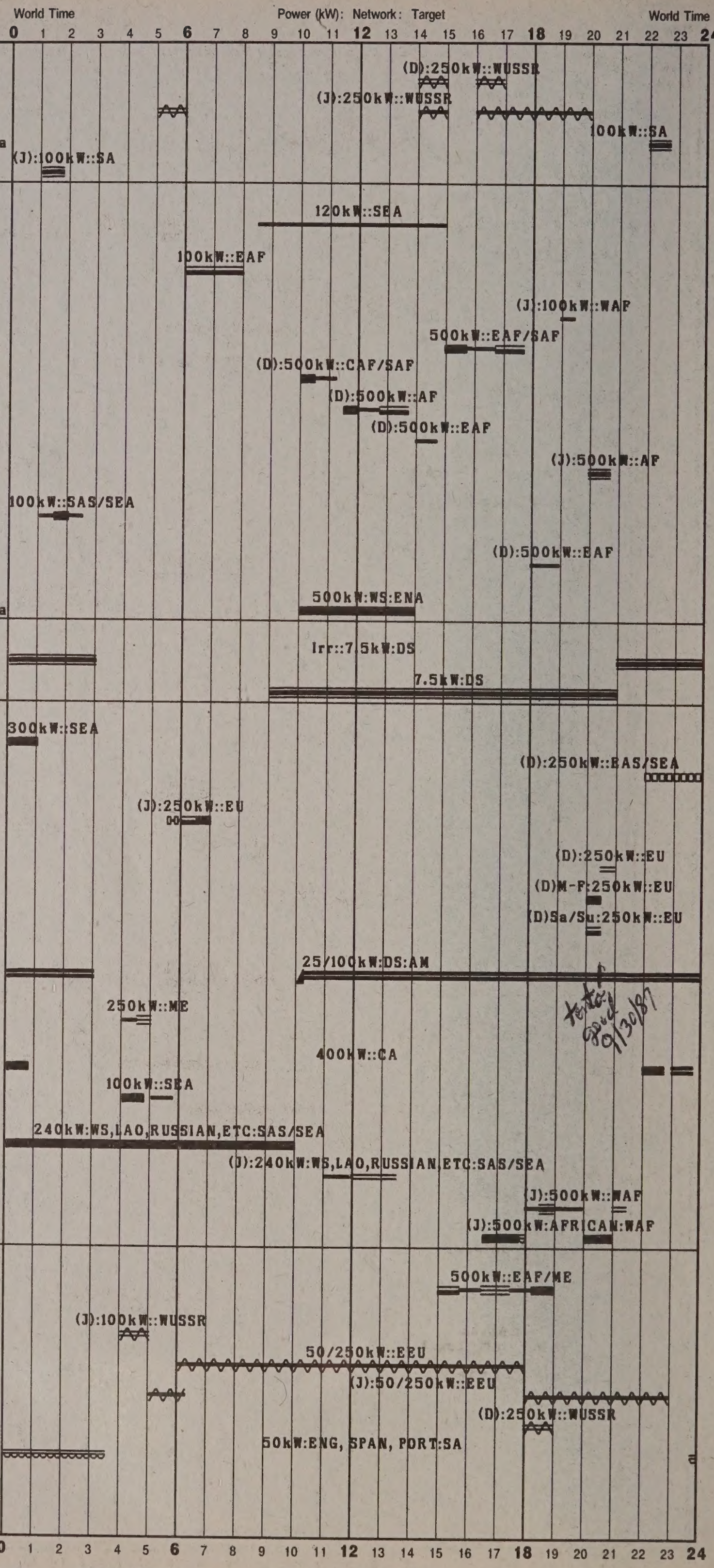
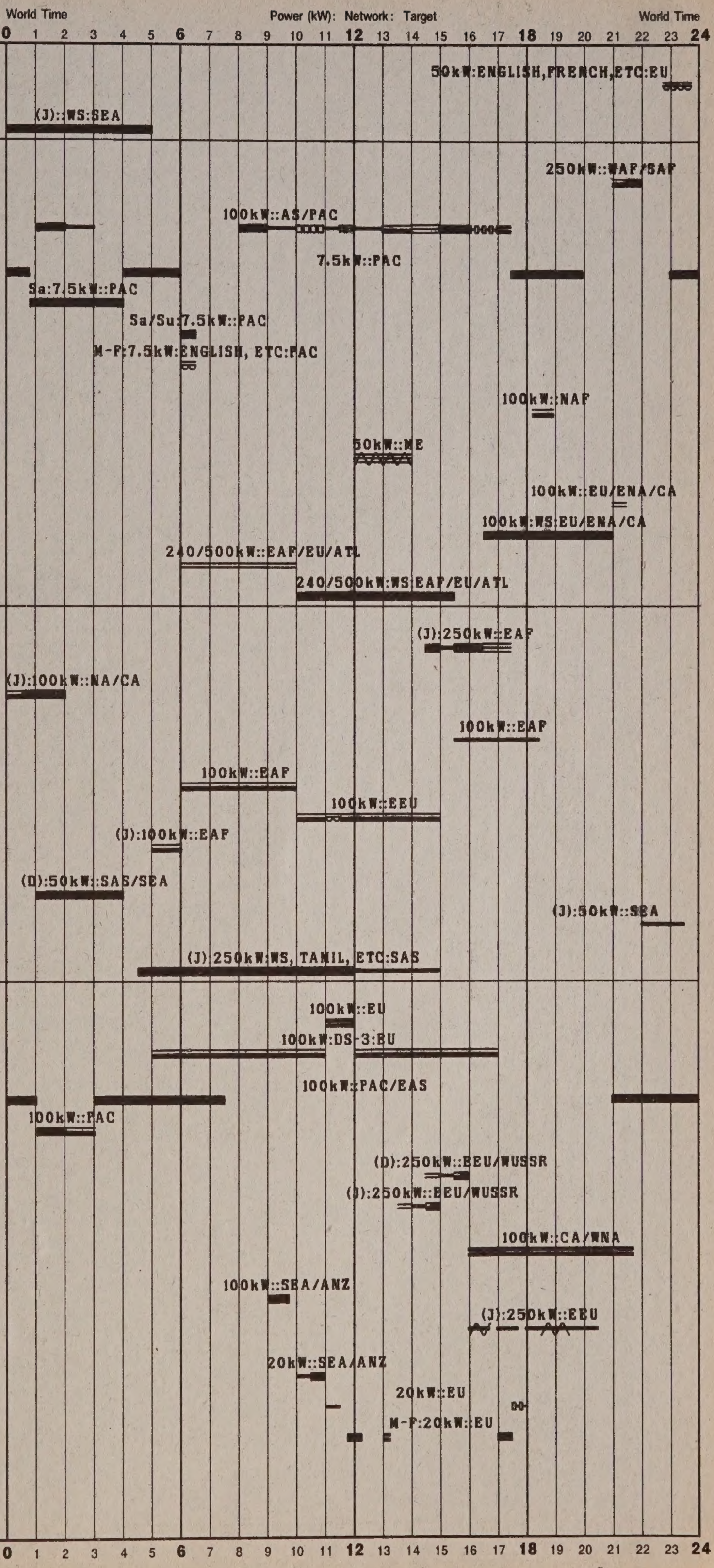


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15130 (con'd)	USA	
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR (J):250kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::SA (J):100kW::SA
15135	CHINA (PR)	
	RADIO BEIJING Kunming	120kW::SEA
	FRANCE	
	RADIO FRANCE INTL Issoudun-Allouis	100kW::EAF
	GERMANY (FR)	
	DEUTSCHE WELLE Jülich	(J):100kW::WAF
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::EAF/SAF
	+DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::CAF/SAF
	+DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::AF
	+DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::EAF
	DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::AF
	PHILIPPINES	
	RADIO VERITAS ASIA Malolos	100kW::SAS/SEA
	USA	
	VOICE OF AMERICA Greenville, NC	(D):500kW::EAF
	USSR	
	RADIO MOSCOW/RP&P Via Plovdiv,Bulgaria	500kW:WS:ENA
15135v	BRAZIL	
	RADIO RECORD São Paulo	Irr::7.5kW:DS 7.5kW:DS
15140	AUSTRALIA	
	RADIO AUSTRALIA Carnarvon	300kW::SEA
	RADIO AUSTRALIA Darwin	(D):250kW::EAS/SEA
	BULGARIA	
	RADIO SOFIA Rebrovo-Sofia	(J):250kW::EU
	CANADA	
	RADIO CANADA INTL Sackville, NB	(D):250kW::EU (D)M-F:250kW::EU (D)Sa/Su:250kW::EU
	CHILE	
	R SISTEMA NACIONAL Santiago	25/100kW:DS:AM
	INDIA	
	ALL INDIA RADIO Aligarh	250kW::ME
	KOREA (DPR)	
	RADIO PYONGYANG Kujang-dong	400kW::CA 100kW::SEA
	USSR	
	RADIO MOSCOW/RP&P Ryazan'	240kW:WS,LAO,RUSSIAN,ETC:SAS/SEA (J):240kW:WS,LAO,RUSSIAN,ETC:SAS/SEA
	RADIO MOSCOW/RP&P Tbilisi	(J):500kW::WAF (J):500kW:AFRICAN:WAF
15145	GERMANY (DR)	
	RADIO BERLIN INTL Nauen	500kW::EAF/ME
	USA	
	RFE-RL Via Germany (FR)	(J):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::EEU
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
(con'd)	WINB-WORLD INTL BC Red Lion, Pa	50kW:ENG, SPAN, PORT:SA

tested good 9/30/87

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ═
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER ―
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15145 (con'd)	USA WINB-WORLD INTL BC Red Lion, Pa	50kW:ENGLISH,FRENCH,ETC:EU
	USSR RADIO MOSCOW/RP&P	(J)::WS:SEA
15150	CANADA RADIO CANADA INTL Sackville, NB	250kW::WAF/SAF
	INDONESIA VOICE OF INDONESIA Jakarta	100kW::AS/PAC
	NEW ZEALAND RADIO NEW ZEALAND Wellington	7.5kW::PAC Sa:7.5kW::PAC Sa/Su:7.5kW::PAC M-F:7.5kW:ENGLISH, ETC:PAC
	UNITED KINGDOM BBC Daventry	100kW::NAF
	USA VOICE OF AMERICA Via Rhodes, Greece	50kW::ME
	USSR RADIO MOSCOW/RP&P Minsk	100kW::EU/ENA/CA 100kW:WS:EU/ENA/CA
	RADIO MOSCOW/RP&P Multiple Locations	240/500kW::EAF/EU/ATL 240/500kW:WS:EAF/EU/ATL
15155	CZECHOSLOVAKIA RADIO PRAGUE Prague	(J):250kW::EAF
	ECUADOR HCJB-VO THE ANDES Quito	(J):100kW::NA/CA
	EGYPT RADIO CAIRO Abu Za'bal	100kW::EAF
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EAF 100kW::EEU (J):100kW::EAF
	USA VOICE OF AMERICA Via Philippines	(D):50kW::SAS/SEA (J):50kW::SEA
	USSR RADIO MOSCOW/RP&P Kazan'	(J):250kW:WS, TAMIL, ETC:SAS
15160	ALGERIA RTV ALGERIENNE Bouchaoui	100kW::EU 100kW:DS-3:EU
	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC/EAS 100kW::PAC
	CANADA RADIO CANADA INTL Via Sines, Portugal	(D):250kW::EEU/WUSSR (J):250kW::EEU/WUSSR
	ECUADOR HCJB-VO THE ANDES Quito	100kW::CA/WNA
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::SEA/ANZ
	DEUTSCHE WELLE Via Sines, Portugal	(J):250kW::EEU
	HUNGARY RADIO BUDAPEST Székesfehérvár	20kW::SEA/ANZ 20kW::EU M-F:20kW::EU
(con'd)		



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ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER ─
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ ✦ TENTATIVE

Frequency (kHz)	Country / Station / Location	World Time — Power (kW): Network: Target
15160 (con'd)	**HUNGARY** RADIO BUDAPEST Székesfehérvár	M-F:20kW::SEA/ANZ M-Sa:20kW::EU Sa:20kW::EU Sa/Su:20kW::EU Su:20kW::EU Su-F:20kW::EU
	INDIA ALL INDIA RADIO Delhi	100kW:DS-ENGLISH, ETC
	KOREA (DPR) RADIO PYONGYANG Kujang-dong	400kW::CA 200kW::SEA
	NORWAY RADIO NORWAY INTL Fredrikstad	Alternative Frequency to 15165kHz
	TURKEY TURKISH RTV CORP Ankara	(J):250kW::ME (J)F:250kW:TURKISH:ME
	USA VOICE OF AMERICA Greenville, NC	M-F:250kW:FEED:CA/SA
	VOICE OF AMERICA Via Kavälla, Greece	(J):250kW::SAS
	VOICE OF AMERICA Via Philippines	50kW::SAS/SEA
	VOICE OF THE OAS Cincinnati, Ohio	250kW::CA/SA
15160v	**MEXICO** LV AMERICA LATINA México City	Irr::10kW:DS
15165	**CHINA (PR)** RADIO BEIJING Xi'an	150kW::ANZ 300kW::SAS/EAF
	DENMARK DANMARKS RADIO Copenhagen	50kW::ENA 50kW::WNA
	INDIA ALL INDIA RADIO Bombay	100kW::EAF
	NORWAY RADIO NORWAY INTL Fredrikstad	Alt 15160kHz:350kW::ME/EAF
	RADIO NORWAY INTL Kvitsøy	500kW::AF 500kW::AS/ANZ (J)M-Sa:500kW::ANZ (J)Su:500kW::ANZ (J)Tu-Su:500kW::ANZ (J)M:500kW:SPANISH, ETC:ANZ
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:SWAHILI:EAF/SAF
15170	**AUSTRALIA** RADIO AUSTRALIA Darwin	(J):250kW::EAS/SEA
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	(D):50kW::ME
	RADIO BERLIN INTL Nauen	500kW::WAF/SAF
	SAUDI ARABIA BS OF THE KINGDOM Jiddah	50kW:DS-HOLY KORAN:CAF
	USA RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::EEU
	WYFR-FAMILY RADIO Okeechobee, Florida	(D):100kW::NA (J):100kW::SA
(con'd)		

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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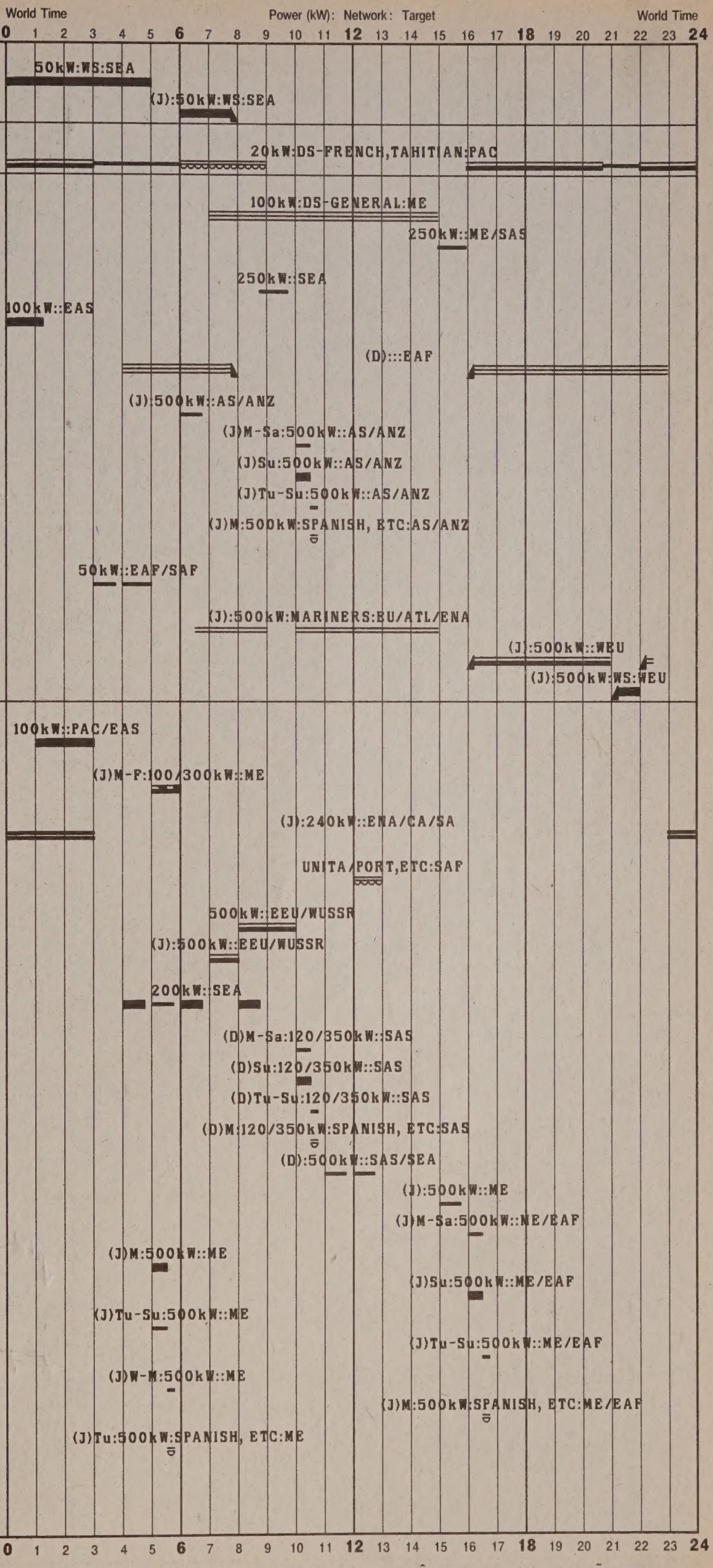
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15170 (con'd)	USSR RADIO MOSCOW/RP&P Irkutsk	50kW:WS:SEA (J):50kW:WS:SEA
15170.4	SOCIETY ISLANDS RFO-TAHITI Papeete	20kW:DS-FRENCH,TAHITIAN:PAC
15175	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-GENERAL:ME
	RADIO CAIRO Kafr Silim-Abis	250kW::ME/SAS
	INDIA ALL INDIA RADIO Aligarh	250kW::SEA
	ALL INDIA RADIO Delhi	100kW::EAS
	IRAQ RADIO BAGHDAD	(D):::EAF
	NORWAY RADIO NORWAY INTL Kvitsøy	(J):500kW::AS/ANZ (J)M-Sa:500kW::AS/ANZ (J)Su:500kW::AS/ANZ (J)Tu-Su:500kW::AS/ANZ (J)M:500kW:SPANISH, ETC:AS/ANZ
	PAKISTAN RADIO PAKISTAN Karachi	50kW::EAF/SAF
	USSR RADIO MOSCOW Armavir	(J):500kW:MARINERS:EU/ATL/ENA
	RADIO MOSCOW/RP&P Armavir	(J):500kW::WEU (J):500kW:WS:WEU
15180	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC/EAS
	CANADA RADIO CANADA INTL Via United Kingdom	(J)M-F:100/300kW::ME
	CHINA (PR) RADIO BEIJING Baoding	(J):240kW::ENA/CA/SA
	CLANDESTINE (AFRICA) "AV DO GALO NEGRO"	UNITA/PORT,ETC:SAF
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	500kW::EEU/WUSSR (J):500kW::EEU/WUSSR
	KOREA (DPR) RADIO PYONGYANG Kujang-dong	200kW::SEA
	NORWAY RADIO NORWAY INTL Fredrikstad	(D)M-Sa:120/350kW::SAS (D)Su:120/350kW::SAS (D)Tu-Su:120/350kW::SAS (D)M:120/350kW:SPANISH, ETC:SAS
	RADIO NORWAY INTL Kvitsøy	(D):500kW::SAS/SEA (J):500kW::ME (J)M-Sa:500kW::ME/EAF (J)M:500kW::ME (J)Su:500kW::ME/EAF (J)Tu-Su:500kW::ME (J)Tu-Su:500kW::ME/EAF (J)W-M:500kW::ME (J)M:500kW:SPANISH, ETC:ME/EAF (J)Tu:500kW:SPANISH, ETC:ME
(con'd)		



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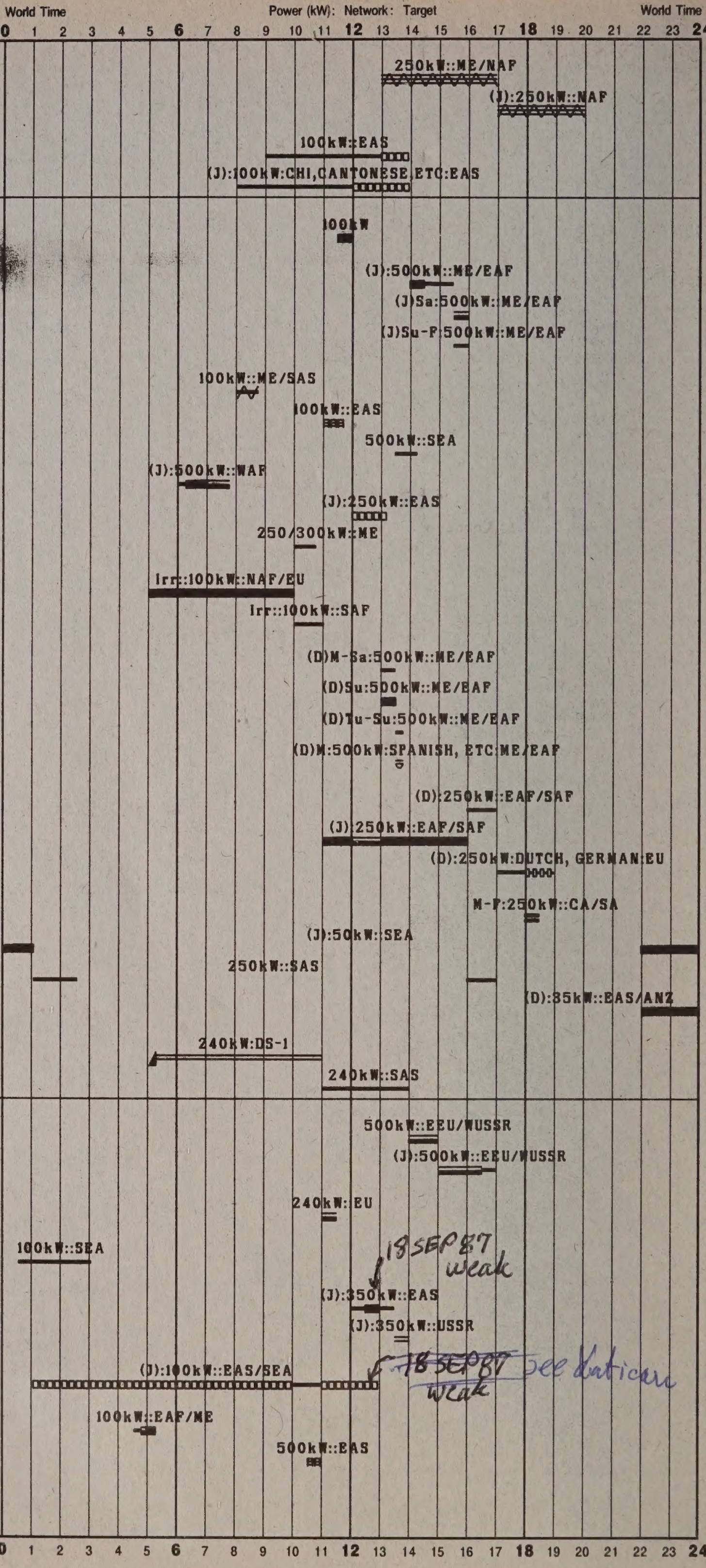
ARABIC / عربى ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▭ MULTILINGUAL ▭ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15180 (con'd)	**UNITED KINGDOM** BBC Skelton, Cumbria	250kW::ME/NAF (J):250kW::NAF
	USSR RADIO MOSCOW/RP&P Komsomol'sk 'Amure	100kW::EAS (J):100kW:CHI,CANTONESE,ETC:EAS
15185	**ALBANIA** RADIO TIRANA Lushnjë	100kW
	FINLAND RADIO FINLAND Pori	(J):500kW::ME/EAF (J)Sa:500kW::ME/EAF (J)Su-F:500kW::ME/EAF
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::ME/SAS 100kW::EAS
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::SEA (J):500kW::WAF
	DEUTSCHE WELLE Via Cyclops, Malta	(J):250kW::EAS
	DEUTSCHE WELLE Via Sri Lanka	250/300kW::ME
	NIGERIA VOICE OF NIGERIA Ikorodu	Irr::100kW::NAF/EU Irr::100kW::SAF
	NORWAY RADIO NORWAY INTL Kvitsøy	(D)M-Sa:500kW::ME/EAF (D)Su:500kW::ME/EAF (D)Tu-Su:500kW::ME/EAF (D)M:500kW:SPANISH, ETC:ME/EAF
	SOUTH AFRICA RADIO RSA Meyerton	(D):250kW::EAF/SAF (J):250kW::EAF/SAF (D):250kW:DUTCH, GERMAN:EU
	USA VOICE OF AMERICA Greenville, NC	M-F:250kW::CA/SA
	VOICE OF AMERICA Via Philippines	(J):50kW::SEA 250kW::SAS (D):35kW::EAS/ANZ
	USSR RADIO MOSCOW Zhigulevsk	240kW:DS-1
	RADIO MOSCOW/RP&P Zhigulevsk	240kW::SAS
15190	**FRANCE** RADIO FRANCE INTL Issoudun-Allouis	500kW::EEU/WUSSR (J):500kW::EEU/WUSSR
	LAOS LAO NATIONAL RADIO Via USSR	240kW::EU
	PHILIPPINES RADIO VERITAS ASIA Malolos	100kW::SEA
	SWEDEN RADIO SWEDEN INTL Hörby	18SEP87 weak (J):350kW::EAS (J):350kW::USSR
	USSR RADIO MOSCOW/RP&P Khabarovsk	(J):100kW::EAS/SEA ~~18SEP87 weak~~ See Vatican
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EAF/ME 500kW::EAS
(con'd)		

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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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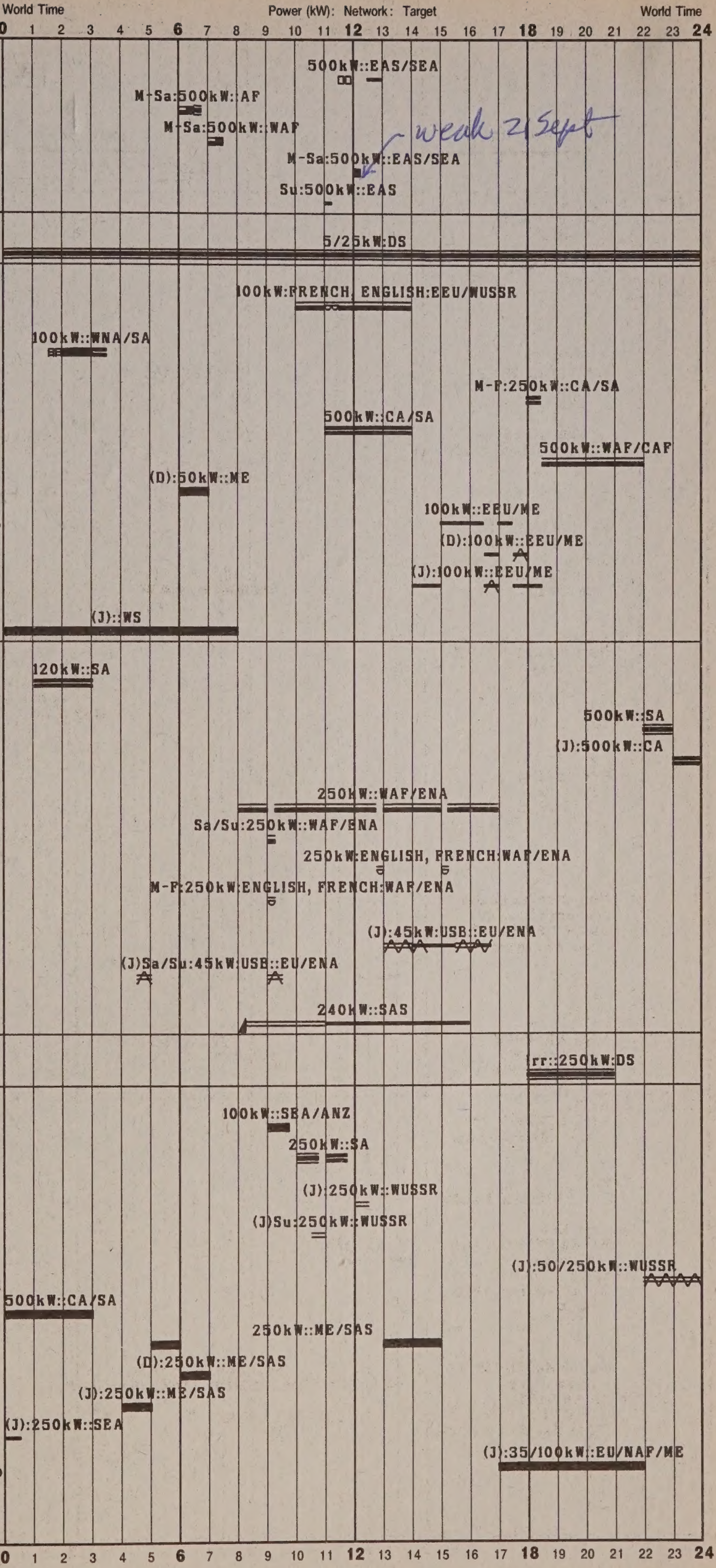

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15190 (con'd)	**VATICAN STATE** VATICAN RADIO Sta Maria di Galeria	500kW::EAS/SEA M-Sa:500kW::AF M-Sa:500kW::WAF M-Sa:500kW::EAS/SEA — weak 21 Sept Su:500kW::EAS
15190v	**BRAZIL** R INCONFIDENCIA Belo Horizonte	5/25kW:DS
15195	**FRANCE** RADIO FRANCE INTL Issoudun-Allouis	100kW:FRENCH, ENGLISH:EEU/WUSSR
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW::WNA/SA
	USA VOICE OF AMERICA Dixon, California	M-F:250kW::CA/SA
	VOICE OF AMERICA Greenville, NC	500kW::CA/SA 500kW::WAF/CAF
	VOICE OF AMERICA Via Rhodes, Greece	(D):50kW::ME
	VOICE OF AMERICA Via Tangier,Morocco	100kW::EEU/ME (D):100kW::EEU/ME (J):100kW::EEU/ME
	USSR RADIO MOSCOW/RP&P	(J)::WS
15200	**CHINA (PR)** RADIO BEIJING Beijing	120kW::SA
	FRANCE RADIO FRANCE INTL Via French Guiana	500kW::SA (J):500kW::CA
	GABON AFRIQUE NUMERO UN Moanda-Moyabe	250kW::WAF/ENA Sa/Su:250kW::WAF/ENA 250kW:ENGLISH, FRENCH:WAF/ENA M-F:250kW:ENGLISH, FRENCH:WAF/ENA
	ISRAEL KOL ISRAEL Tel Aviv	(J):45kW:USB::EU/ENA (J)Sa/Su:45kW:USB::EU/ENA
	USSR RADIO MOSCOW/RP&P Kalach	240kW::SAS
15200v	**BRAZIL** R NAC DA AMAZONIA Brasília	Irr::250kW:DS
15205	**GERMANY (FR)** DEUTSCHE WELLE Jülich	100kW::SEA/ANZ
	DEUTSCHE WELLE Via Antigua	250kW::SA
	UNITED KINGDOM BBC Woofferton	(J):250kW::WUSSR (J)Su:250kW::WUSSR
	USA RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR
	VOICE OF AMERICA Greenville, NC	500kW::CA/SA
	VOICE OF AMERICA Via Kavála, Greece	250kW::ME/SAS (D):250kW::ME/SAS (J):250kW::ME/SAS
	VOICE OF AMERICA Via Philippines	(J):250kW::SEA
(con'd)	VOICE OF AMERICA Via Tangier,Morocco	(J):35/100kW::EU/NAF/ME

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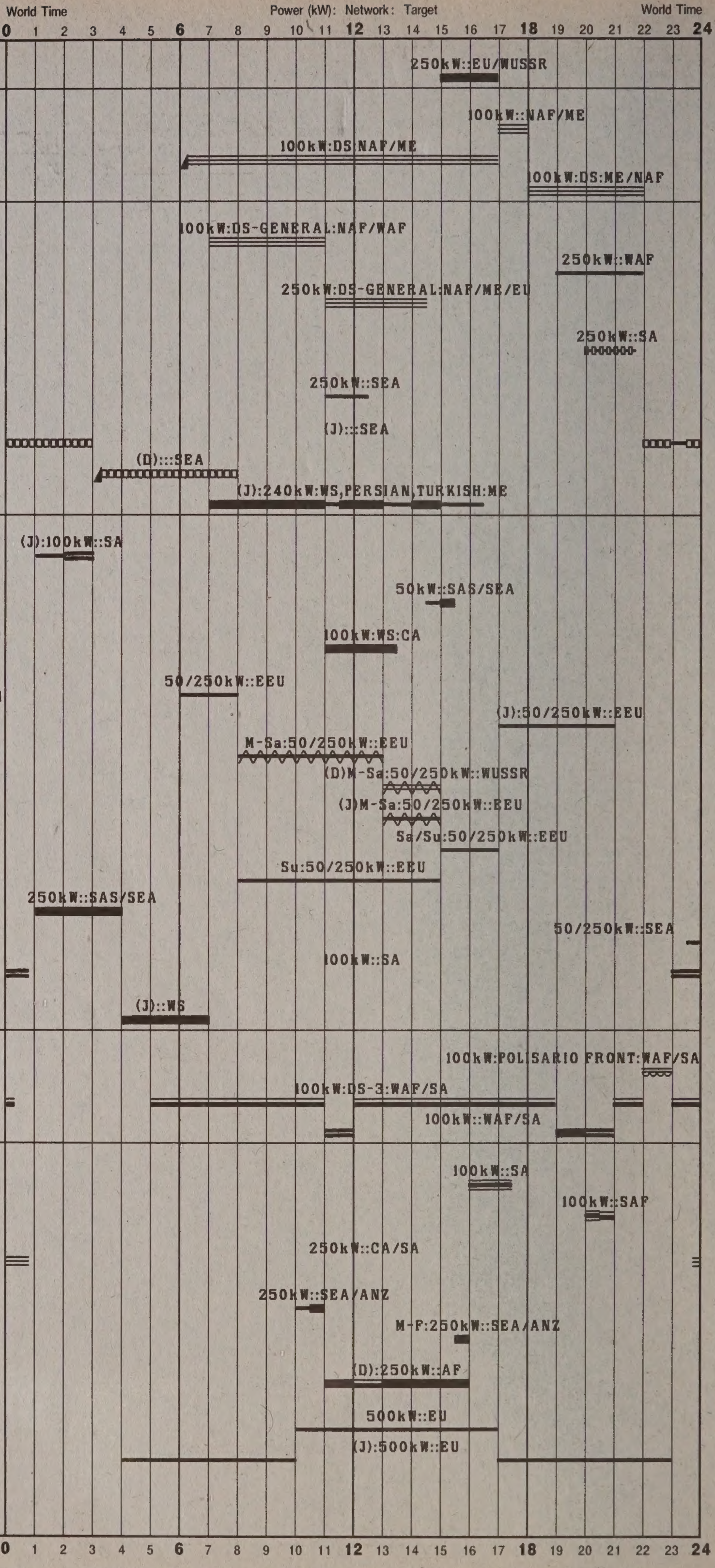
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15205 (con'd)	USA VOICE OF AMERICA Via Woofferton, UK	250kW::EU/WUSSR
15205v	ALGERIA 'VO PALESTINE' Via RTV Algerienne	100kW::NAF/ME
	RTV ALGERIENNE Bouchaoui	100kW:DS:NAF/ME 100kW:DS:ME/NAF
15210	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-GENERAL:NAF/WAF
	RADIO CAIRO Kafr Silim-Abis	250kW::WAF 250kW:DS-GENERAL:NAF/ME/EU
	GERMANY (FR) DEUTSCHE WELLE Via Antigua	250kW::SA
	USA VOICE OF AMERICA Via Philippines	250kW::SEA
	USSR RADIO MOSCOW/RP&P	(J):::SEA (D):::SEA
	RADIO MOSCOW/RP&P Moscow	(J):240kW:WS,PERSIAN,TURKISH:ME
15215	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(J):100kW::SA
	PHILIPPINES RADIO VERITAS ASIA Malolos	50kW::SAS/SEA
	UNITED KINGDOM BBC Daventry	100kW:WS:CA
	USA RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::EEU M-Sa:50/250kW::EEU (D)M-Sa:50/250kW::WUSSR (J)M-Sa:50/250kW::EEU Sa/Su:50/250kW::EEU Su:50/250kW::EEU
	VOICE OF AMERICA Via Philippines	250kW::SAS/SEA 50/250kW::SEA
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::SA
	USSR RADIO MOSCOW/RP&P	(J)::WS
15215v	ALGERIA 'VO FREE SAHARA' Via RTV Algerienne	100kW:POLISARIO FRONT:WAF/SA
	RTV ALGERIENNE Bouchaoui	100kW:DS-3:WAF/SA 100kW::WAF/SA
15220	ECUADOR HCJB-VO THE ANDES Quito	100kW::SA 100kW::SAF
	EGYPT RADIO CAIRO Kafr Silim-Abis	250kW::CA/SA
	HUNGARY RADIO BUDAPEST Jászberény	250kW::SEA/ANZ M-F:250kW::SEA/ANZ
	SOUTH AFRICA RADIO RSA Meyerton	(D):250kW::AF
	TURKEY TURKISH RTV CORP Ankara	500kW::EU (J):500kW::EU
(con'd)		



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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15220 (con'd)	**UNITED KINGDOM**	
	BBC Skelton, Cumbria	100kW::WUSSR
	USSR	
	RADIO MOSCOW/RP&P Dushanbé	(J):500kW:WS,VIETNAMESE,ETC:SEA
	RADIO MOSCOW/RP&P Zhigulevsk	(D):240kW:WS, URDU, ETC:SAS
15225	**PORTUGAL**	
	RADIO PORTUGUESA Lisbon-São Gabriel	100kW::SEA
	USA	
	VOICE OF AMERICA Via Kaválla, Greece	(J):250kW::ME/SAS
	VOICE OF AMERICA Via Woofferton, UK	(D):250kW::WUSSR (J):250kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	(J):50kW::CA/WNA
15230	**BRAZIL**	
	RADIO NACIONAL Brasília	250kW::EU/WAF
	CUBA	
	RADIO HABANA Havana	(J):250kW::SA
	RADIO HABANA Via USSR	(J):120kW::WEU/WAF
	INDIA	
	ALL INDIA RADIO Delhi	100kW::EAS 100kW::SEA
	ISRAEL	
	KOL ISRAEL Tel Aviv	(J):7.5kW::EU
	JAPAN	
	RADIO JAPAN/NHK Via Moyabi, Gabon	250kW:GENERAL:EU
	NORWAY	
	RADIO NORWAY INTL Fredrikstad	(J):120/350kW::WAF M-Sa:120/350kW::WEU/WAF/SA Su:120/350kW::WEU/WAF/SA Tu-Su:120/350kW::WEU/WAF/SA M:120/350kW:SPANISH, ETC:WEU/WAF/SA
	USSR	
	RADIO MOSCOW/RP&P Alma-Ata	(J):100kW:WS,VIETNAMESE,ETC:SEA
15235	**CANADA**	
	RADIO CANADA INTL Via United Kingdom	(D)M-F:100/300kW::ME
	+RADIO CANADA INTL Via United Kingdom	(D)M-F:100/300kW::ME
	JAPAN	
	RADIO JAPAN/NHK Tōkyō-Yamata	100kW::ANZ 100kW:GENERAL:SEA 100kW:GENERAL:ANZ
	UNITED KINGDOM	
	BBC Skelton, Cumbria	250kW::EEU Su:250kW::EEU
	BBC Via Maşirah, Oman	100kW::ME/NAF
	BBC Woofferton	Su:250kW::WUSSR
	USA	
	VOICE OF AMERICA Via Tangier,Morocco	(J):100kW::EEU
	VOICE OF AMERICA Via Woofferton, UK	300kW::NAF 300kW::USSR (D):300kW::WUSSR/ME (J):300kW::USSR
15240 (con'd)	**AUSTRALIA**	
	RADIO AUSTRALIA Shepparton	50/100kW::PAC/SEA 50kW::PAC

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15240 (con'd)	**GERMANY (DR)** RADIO BERLIN INTL Königswusterhausen	100kW:ENGLISH, HINDI:SAS/SEA
	RADIO BERLIN INTL Nauen	500kW::ME/NAF/EAF 500kW::SAS/SEA
	GUAM KTWR-TRANS WORLD R Merizo	100kW::SEA
	INDIA ALL INDIA RADIO Delhi	20kW:DS-ENGLISH, ETC
	PHILIPPINES RADIO VERITAS ASIA Malolos	SEA
	SOUTH AFRICA RADIO RSA Meyerton	(J):250kW:DUTCH, GERMAN:EU
	SWEDEN RADIO SWEDEN INTL Hörby	(J):350kW::ME (J):350kW::EAF
	YUGOSLAVIA RADIO YUGOSLAVIA Belgrade	100kW::EAF/ME 100kW::ME/SAS/SEA
15245	**FINLAND** RADIO FINLAND Pori	(J):500kW::SEA/ANZ
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(D):250kW::ME/SAS
	DEUTSCHE WELLE Via Sines, Portugal	250kW::EU/WUSSR (D):250kW::EU/WUSSR (J):250kW::EU/WUSSR
	INDIA ALL INDIA RADIO Delhi	100kW:DS-ENGLISH, ETC
	ITALY RTV ITALIANA Rome	100kW::SA 100kW::CA/SA
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:PERSIAN:ME
	SOUTH AFRICA +RADIO RSA Meyerton	(D):250/500kW::AF/EU
	SWEDEN RADIO SWEDEN INTL Hörby	(J):350kW::EAF/SAF
	RADIO SWEDEN INTL Karlsborg	(D):350kW::ME
	UNITED KINGDOM BBC Holywell-Rampisham	(J):500kW::EU/USSR (J)M-Sa/W/Th:500kW::EU/USSR (J)Su:500kW::EU/USSR
	UNITED NATIONS UNITED NATIONS R Via Rome, Italy	M:100kW
	USA VOICE OF AMERICA Greenville, NC	500kW::NAF
	VOICE OF AMERICA Via Tangier,Morocco	(D):35kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(D):300kW::WUSSR
	USSR RADIO MOSCOW/RP&P Irkutsk	(J):500kW::SEA
	RADIO MOSCOW/RP&P Petropavlovsk-Kam	(J):120kW:WS:WNA
	ZAIRE LA VOIX DU ZAIRE Kinshasa	100kW:DS-FRENCH, ETC
15250	**ECUADOR** HCJB-VO THE ANDES Quito	250kW::SA
(con'd)	**INDIA** ALL INDIA RADIO Delhi	100kW:DS-ENGLISH, ETC

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

note — One hour earlier than shown

Eng 24 SEP 97

note: 1 hr shift

18 SEP 87

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ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▦ MULTILINGUAL ▭▭▭ OTHER —

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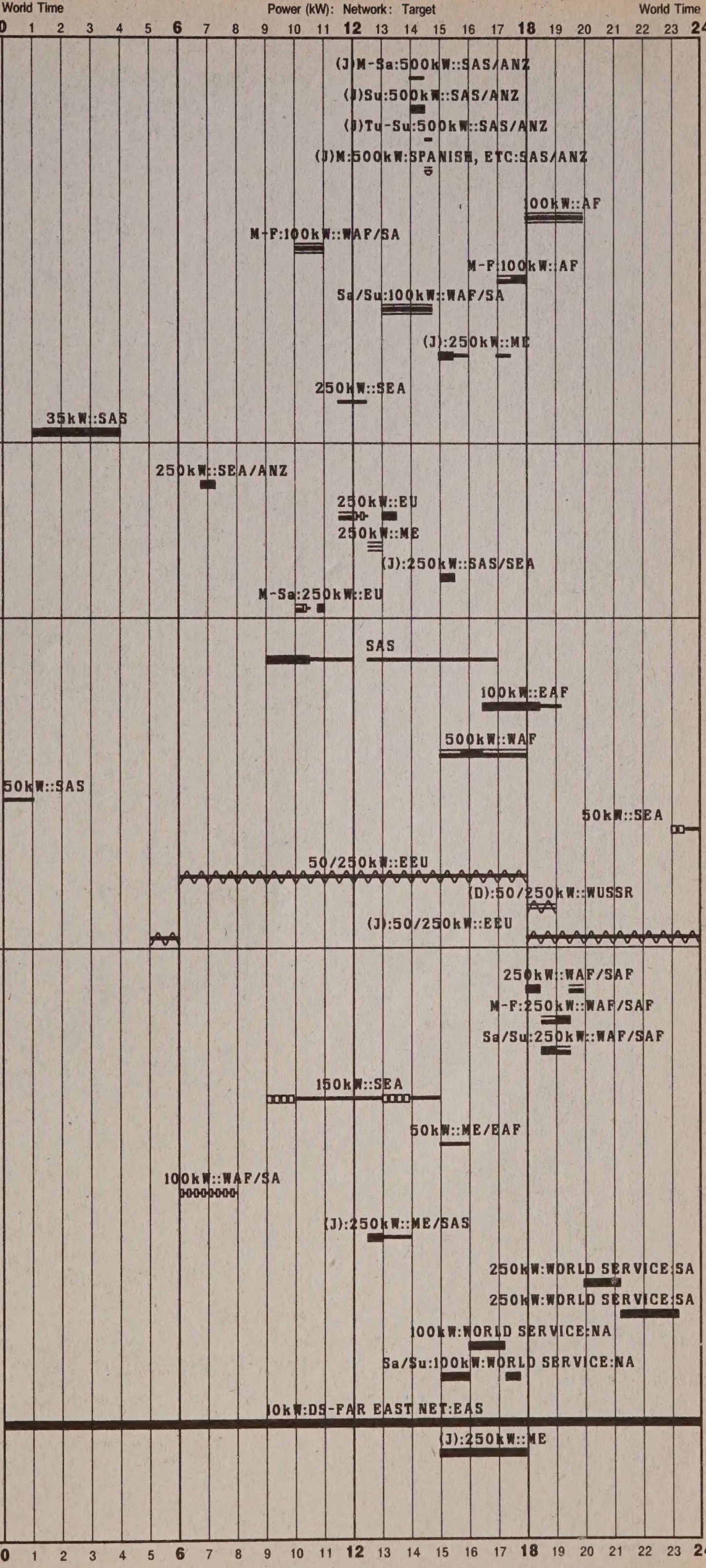

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15250 (con'd)	NORWAY RADIO NORWAY INTL Kvitsøy	(J)M-Sa:500kW::SAS/ANZ (J)Su:500kW::SAS/ANZ (J)Tu-Su:500kW::SAS/ANZ (J)M:500kW:SPANISH, ETC:SAS/ANZ
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	100kW::AF M-F:100kW::WAF/SA M-F:100kW::AF Sa/Su:100kW::WAF/SA
	ROMANIA RADIO BUCHAREST Bucharest	(J):250kW::ME
	USA VOICE OF AMERICA Via Philippines	250kW::SEA
	VOICE OF AMERICA Via Sri Lanka	35kW::SAS
15250v	ROMANIA RADIO BUCHAREST Bucharest	250kW::SEA/ANZ 250kW::EU 250kW::ME (J):250kW::SAS/SEA M-Sa:250kW::EU
15255	AFGHANISTAN RADIO AFGHANISTAN Via USSR	SAS
	EGYPT RADIO CAIRO Abu Za'bal	100kW::EAF
	GERMANY (DR) RADIO BERLIN INTL Nauen	500kW::WAF
	PHILIPPINES RADIO VERITAS ASIA Malolos	50kW::SAS 50kW::SEA
	USA RFE-RL Via Lisbon, Portugal	50/250kW::EEU (D):50/250kW::WUSSR (J):50/250kW::EEU
15260	CANADA RADIO CANADA INTL Sackville, NB	250kW::WAF/SAF M-F:250kW::WAF/SAF Sa/Su:250kW::WAF/SAF
	CHINA (PR) RADIO BEIJING Xi'an	150kW::SEA
	DENMARK DANMARKS RADIO Copenhagen	50kW::ME/EAF
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::WAF/SA
	TURKEY TURKISH RTV CORP Ankara	(J):250kW::ME/SAS
	UNITED KINGDOM BBC Via Antigua	250kW:WORLD SERVICE:SA
	BBC Via Ascension	250kW:WORLD SERVICE:SA
	BBC Via Sackville, Can	100kW:WORLD SERVICE:NA Sa/Su:100kW:WORLD SERVICE:NA
	USA AFRTS-US MILITARY Via Tōkyō, Japan	10kW:DS-FAR EAST NET:EAS
(con'd)	VOICE OF AMERICA Via Kaválla, Greece	(J):250kW::ME

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ARABIC / عربي ☰ RUSSIAN / PYCCKИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —

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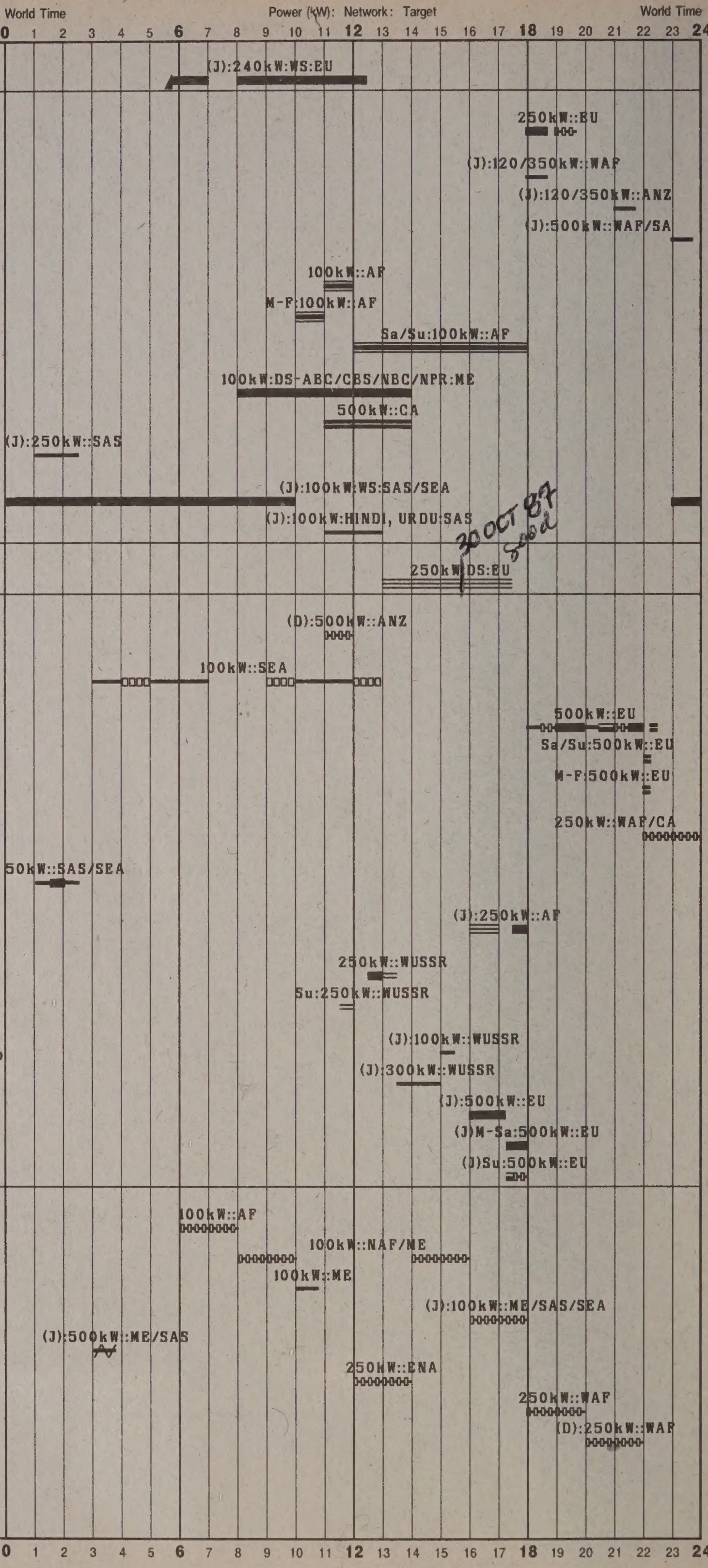

Frequency (kHz)	Country / Station / Location	World Time 0–24 · Power (kW): Network: Target
15260 (con'd)	**USSR** RADIO MOSCOW/RP&P Baku	(J):240kW:WS:EU
15265	**BRAZIL** RADIO NACIONAL Brasília	250kW::EU
	NORWAY RADIO NORWAY INTL Fredrikstad	(J):120/350kW::WAF (J):120/350kW::ANZ
	RADIO NORWAY INTL Kvitsøy	(J):500kW::WAF/SA
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	100kW::AF M-F:100kW::AF Sa/Su:100kW::AF
	USA AFRTS-US MILITARY Via Ismaning, GFR	100kW:DS-ABC/CBS/NBC/NPR:ME
	VOICE OF AMERICA Greenville, NC	500kW::CA
	VOICE OF AMERICA Via Philippines	(J):250kW::SAS
	USSR RADIO MOSCOW/RP&P Chita	(J):100kW:WS:SAS/SEA (J):100kW:HINDI, URDU:SAS
15265.6	**QATAR** QATAR BC SERVICE Doha	250kW:DS:EU
15270	**AUSTRIA** RADIO AUSTRIA INTL Vienna	(D):500kW::ANZ
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	100kW::SEA
	ECUADOR HCJB-VO THE ANDES Quito	500kW::EU Sa/Su:500kW::EU
	RADIO NACIONAL Quito	M-F:500kW::EU
	GERMANY (FR) DEUTSCHE WELLE Via Kigali, Rwanda	250kW::WAF/CA
	PHILIPPINES RADIO VERITAS ASIA Malolos	50kW::SAS/SEA
	ROMANIA RADIO BUCHAREST Bucharest	(J):250kW::AF
	UNITED KINGDOM BBC Various Locations	250kW::WUSSR Su:250kW::WUSSR
	USA VOICE OF AMERICA Via Tangier, Morocco	(J):100kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR
	WCSN Olamon, Maine	(J):500kW::EU (J)M-Sa:500kW::EU (J)Su:500kW::EU
15275	**GERMANY (FR)** DEUTSCHE WELLE Jülich	100kW::AF 100kW::NAF/ME 100kW::ME (J):100kW::ME/SAS/SEA
	DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::ME/SAS
	DEUTSCHE WELLE Via Antigua	250kW::ENA
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::WAF (D):250kW::WAF
(con'd)		

30 OCT 87
Good

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ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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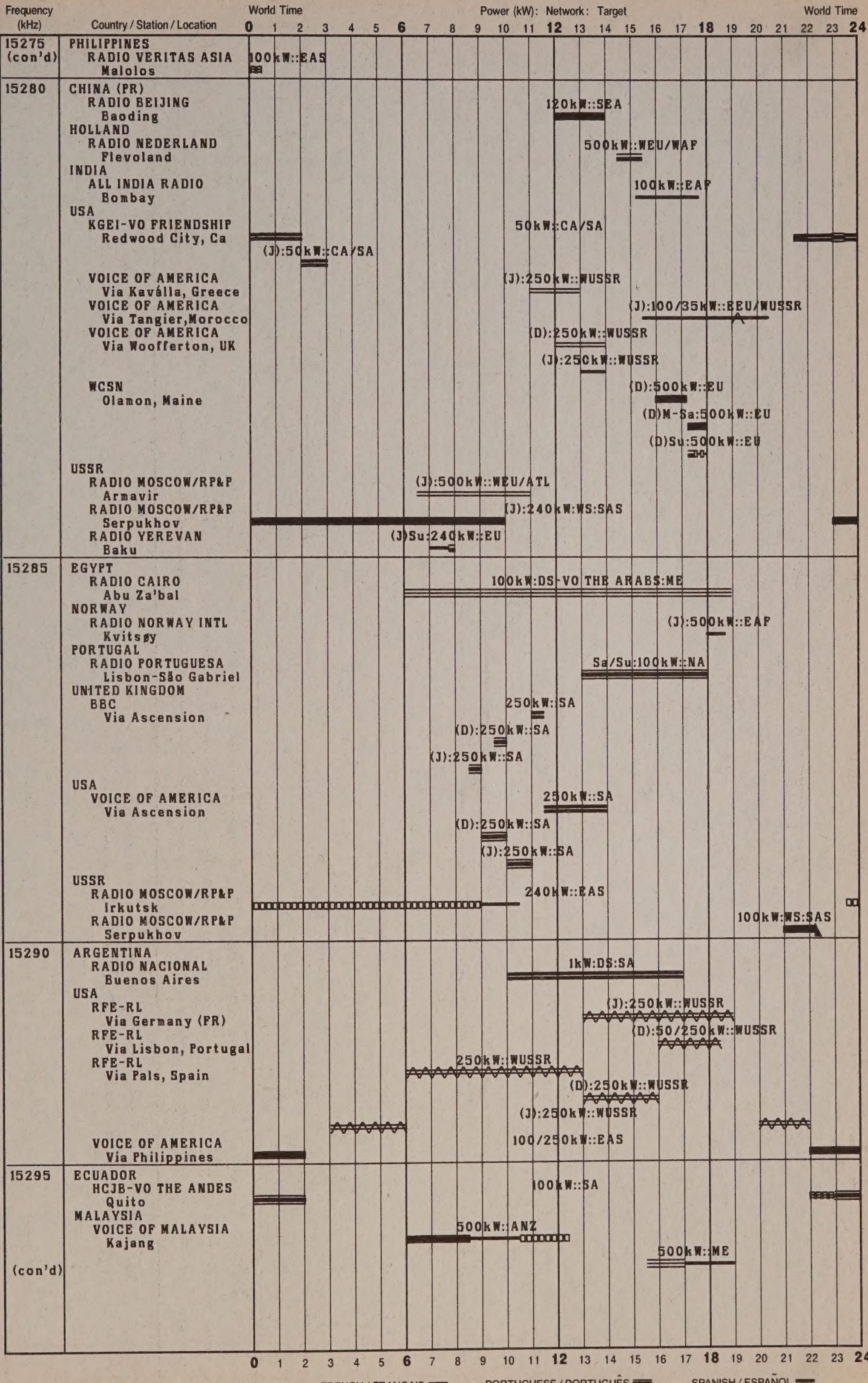


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15275 (con'd)	PHILIPPINES RADIO VERITAS ASIA Malolos	100kW::EAS
15280	CHINA (PR) RADIO BEIJING Baoding	120kW::SEA
	HOLLAND RADIO NEDERLAND Flevoland	500kW::WEU/WAF
	INDIA ALL INDIA RADIO Bombay	100kW::EAF
	USA KGEI-VO FRIENDSHIP Redwood City, Ca	50kW::CA/SA
		(J):50kW::CA/SA
	VOICE OF AMERICA Via Kaválla, Greece	(J):250kW::WUSSR
	VOICE OF AMERICA Via Tangier, Morocco	(J):100/35kW::EEU/WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(D):250kW::WUSSR
		(J):250kW::WUSSR
	WCSN Olamon, Maine	(D):500kW::EU
		(D)M-Sa:500kW::EU
		(D)Su:500kW::EU
	USSR RADIO MOSCOW/RP&P Armavir	(J):500kW::WEU/ATL
	RADIO MOSCOW/RP&P Serpukhov	(J):240kW:WS:SAS
	RADIO YEREVAN Baku	(J)Su:240kW::EU
15285	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-VO THE ARABS:ME
	NORWAY RADIO NORWAY INTL Kvitsøy	(J):500kW::EAF
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	Sa/Su:100kW::NA
	UNITED KINGDOM BBC Via Ascension	250kW::SA
		(D):250kW::SA
		(J):250kW::SA
	USA VOICE OF AMERICA Via Ascension	250kW::SA
		(D):250kW::SA
		(J):250kW::SA
	USSR RADIO MOSCOW/RP&P Irkutsk	240kW::EAS
	RADIO MOSCOW/RP&P Serpukhov	100kW:WS:SAS
15290	ARGENTINA RADIO NACIONAL Buenos Aires	1kW:DS:SA
	USA RFE-RL Via Germany (FR)	(J):250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	250kW::WUSSR
		(D):250kW::WUSSR
		(J):250kW::WUSSR
	VOICE OF AMERICA Via Philippines	100/250kW::EAS
15295	ECUADOR HCJB-VO THE ANDES Quito	100kW::SA
	MALAYSIA VOICE OF MALAYSIA Kajang	500kW::ANZ
		500kW::ME
(con'd)		

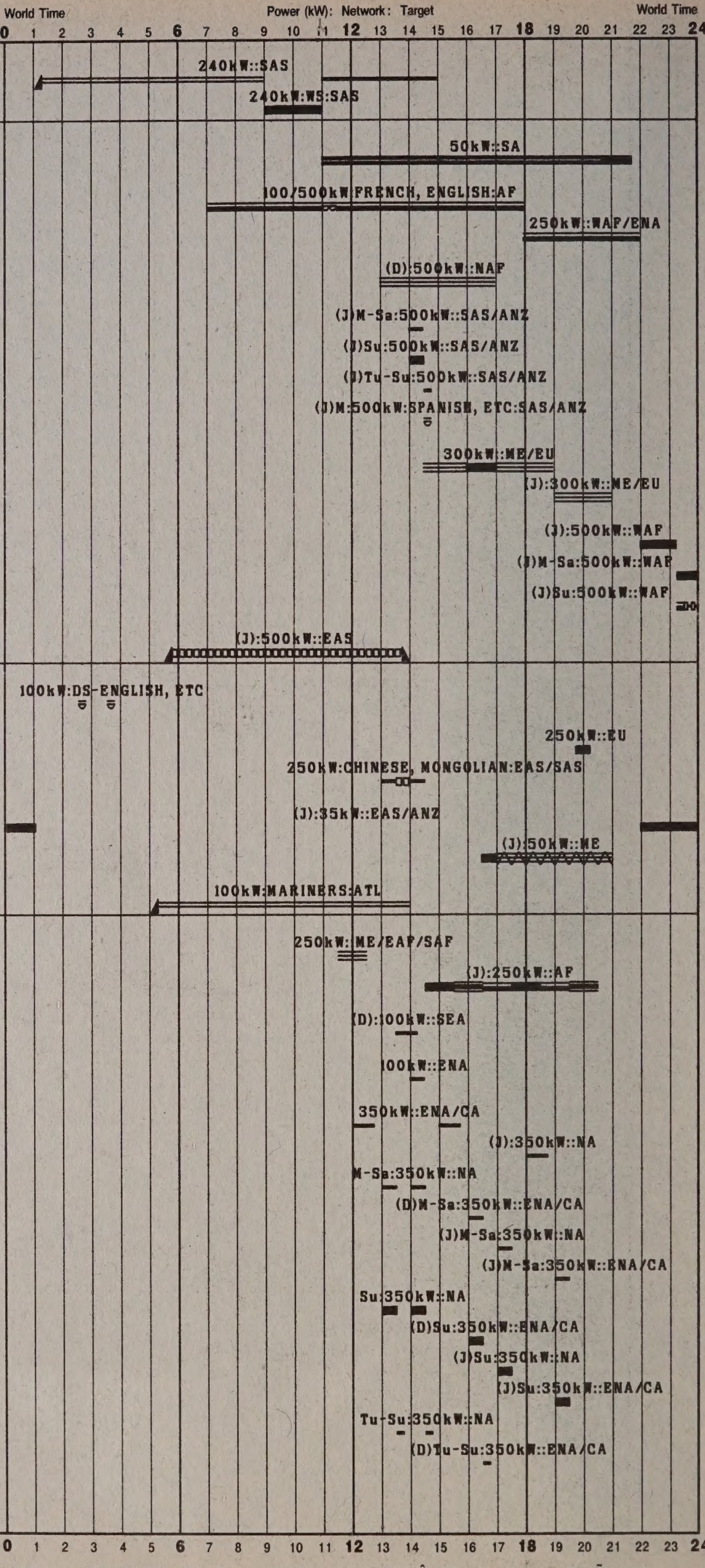
World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ENGLISH ▬ GERMAN / DEUTSCH ▭▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬

ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ═ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15295 (con'd)	USSR RADIO MOSCOW/RP&P Voronezh, RSFSR	240kW::SAS 240kW:WS:SAS
15300	CUBA RADIO HABANA Havana	50kW::SA
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100/500kW:FRENCH, ENGLISH:AF
	RADIO FRANCE INTL Via French Guiana	250kW::WAF/ENA
	IRAQ RADIO BAGHDAD Balad-Salah el Deen	(D):500kW::NAF
	NORWAY RADIO NORWAY INTL Kvitsøy	(J)M-Sa:500kW::SAS/ANZ (J)Su:500kW::SAS/ANZ (J)Tu-Su:500kW::SAS/ANZ (J)M:500kW:SPANISH, ETC:SAS/ANZ
	UNITED ARAB EMIRATES UAE RADIO Dubai	300kW::ME/EU (J):300kW::ME/EU
	USA WCSN Olamon, Maine	(J):500kW::WAF (J)M-Sa:500kW::WAF (J)Su:500kW::WAF
	USSR RADIO MOSCOW/RP&P Novosibirsk	(J):500kW::EAS
15305	INDIA ALL INDIA RADIO Delhi	100kW:DS-ENGLISH, ETC
	MONGOLIA RADIO ULAN BATOR Ulan Bator	250kW::EU 250kW:CHINESE, MONGOLIAN:EAS/SAS
	USA VOICE OF AMERICA Via Philippines	(J):35kW::EAS/ANZ
	VOICE OF AMERICA Via Rhodes, Greece	(J):50kW::ME
	USSR RADIO MOSCOW Voronezh, RSFSR	100kW:MARINERS:ATL
15310	BULGARIA RADIO SOFIA Rebrovo-Sofia	250kW::ME/EAF/SAF (J):250kW::AF
	GERMANY (FR) +DEUTSCHE WELLE Jülich	(D):100kW::SEA
	ITALY RTV ITALIANA Rome	100kW::ENA
	NORWAY RADIO NORWAY INTL Fredrikstad	350kW::ENA/CA (J):350kW::NA M-Sa:350kW::NA (D)M-Sa:350kW::ENA/CA (J)M-Sa:350kW::NA (J)M-Sa:350kW::ENA/CA Su:350kW::NA (D)Su:350kW::ENA/CA (J)Su:350kW::NA (J)Su:350kW::ENA/CA Tu-Su:350kW::NA (D)Tu-Su:350kW::ENA/CA
(con'd)		



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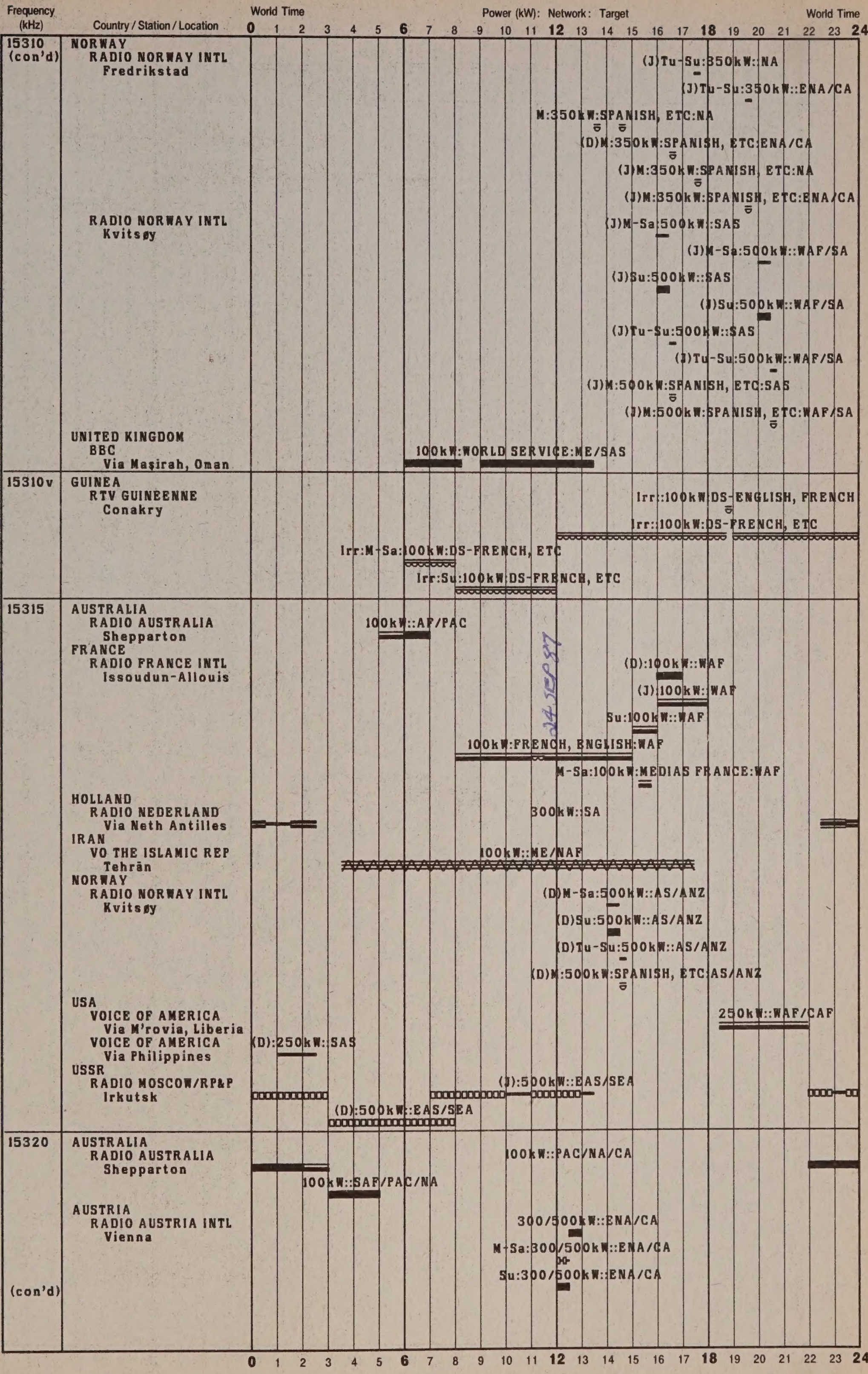
ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15310 (con'd)	NORWAY RADIO NORWAY INTL Fredrikstad	(J)Tu-Su:350kW::NA
		(J)Tu-Su:350kW::ENA/CA
		M:350kW:SPANISH, ETC:NA
		(D)M:350kW:SPANISH, ETC:ENA/CA
		(J)M:350kW:SPANISH, ETC:NA
		(J)M:350kW:SPANISH, ETC:ENA/CA
	RADIO NORWAY INTL Kvitsøy	(J)M-Sa:500kW::SAS
		(J)M-Sa:500kW::WAF/SA
		(J)Su:500kW::SAS
		(J)Su:500kW::WAF/SA
		(J)Tu-Su:500kW::SAS
		(J)Tu-Su:500kW::WAF/SA
		(J)M:500kW:SPANISH, ETC:SAS
		(J)M:500kW:SPANISH, ETC:WAF/SA
	UNITED KINGDOM BBC Via Maşirah, Oman	100kW:WORLD SERVICE:ME/SAS
15310v	GUINEA RTV GUINEENNE Conakry	Irr::100kW:DS-ENGLISH, FRENCH
		Irr::100kW:DS-FRENCH, ETC
		Irr:M-Sa:100kW:DS-FRENCH, ETC
		Irr:Su:100kW:DS-FRENCH, ETC
15315	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::AF/PAC
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(D):100kW::WAF
		(J):100kW::WAF
		Su:100kW::WAF
		100kW:FRENCH, ENGLISH:WAF
		M-Sa:100kW:MEDIAS FRANCE:WAF
	HOLLAND RADIO NEDERLAND Via Neth Antilles	300kW::SA
	IRAN VO THE ISLAMIC REP Tehrān	100kW::ME/NAF
	NORWAY RADIO NORWAY INTL Kvitsøy	(D)M-Sa:500kW::AS/ANZ
		(D)Su:500kW::AS/ANZ
		(D)Tu-Su:500kW::AS/ANZ
		(D)M:500kW:SPANISH, ETC:AS/ANZ
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/CAF
	VOICE OF AMERICA Via Philippines	(D):250kW::SAS
	USSR RADIO MOSCOW/RP&P Irkutsk	(J):500kW::EAS/SEA
		(D):500kW::EAS/SEA
15320	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC/NA/CA
		100kW::SAF/PAC/NA
	AUSTRIA RADIO AUSTRIA INTL Vienna	300/500kW::ENA/CA
		M-Sa:300/500kW::ENA/CA
		Su:300/500kW::ENA/CA
(con'd)		

24 SEP 87

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ARABIC / عر ▬ RUSSIAN / РУССКИИ ▬ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

World Time · Power (kW): Network: Target · World Time 0–24

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15320 (con'd)	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::AS (J):100kW::EU/AF (J):100kW::AS
	DEUTSCHE WELLE Türkheim-Wertach'l	(D):500kW::ME/SAS
	INDIA ALL INDIA RADIO Aligarh	(J):250kW::EAS
	ALL INDIA RADIO Delhi	100kW::ME 100kW:DS-ENGLISH, ETC
	UNITED ARAB EMIRATES UAE RADIO Dubai	300kW::EU/ME (J):300kW::EU/ME
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/CAF M-F:250kW::WAF/CAF
	USSR RADIO MOSCOW/RP&P Kingisepp	(J):100kW:WS:ME
	RADIO MOSCOW/RP&P Orcha	100kW:WS, PERSIAN:ME
15325	CANADA RADIO CANADA INTL Sackville, NB	250kW::EU/WUSSR M-F:250kW::EU/WUSSR (J)M-F:250kW::EU Sa/Su:250kW::EU/WUSSR
	NORWAY RADIO NORWAY INTL Fredrikstad	(D):120/350kW::NA
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::SAS Sa:80kW::SAS
	UNITED ARAB EMIRATES UAE RADIO Dubai	300kW::EU/ME
	USA VOICE OF AMERICA Via Philippines	250kW::EUSSR
15325v	BRAZIL RADIO GAZETA São Paulo	Irr::1kW:DS
15330	BULGARIA RADIO SOFIA Rebrovo-Sofia	(J):250kW::NA
	CHINA (PR) RADIO BEIJING Beijing	150kW::SEA
	RADIO BEIJING Xi'an	(J):150kW::SEA
	GERMANY (FR) +DEUTSCHE WELLE Jülich	(D):100kW::CAF/SAF
	DEUTSCHE WELLE Jülich	(J):100kW::EEU
	ITALY RTV ITALIANA Rome	100kW::SAS/SEA 100kW::EAF/ME 100kW::ME/SEA/ANZ 100kW::EAS Su:100kW::SEA/ANZ
	MOROCCO RTV MAROCAINE Tangier	50kW:DS:ME/EU/NAF
	USA AFRTS-US MILITARY Cincinnati, Ohio	175kW:DS-ABC/CBS/NBC/NPR:CA/SA
	VOICE OF AMERICA Via Ismaning, GFR	100kW::NAF
(con'd)	VOICE OF AMERICA Via M'rovia, Liberia	(D):250kW::SA

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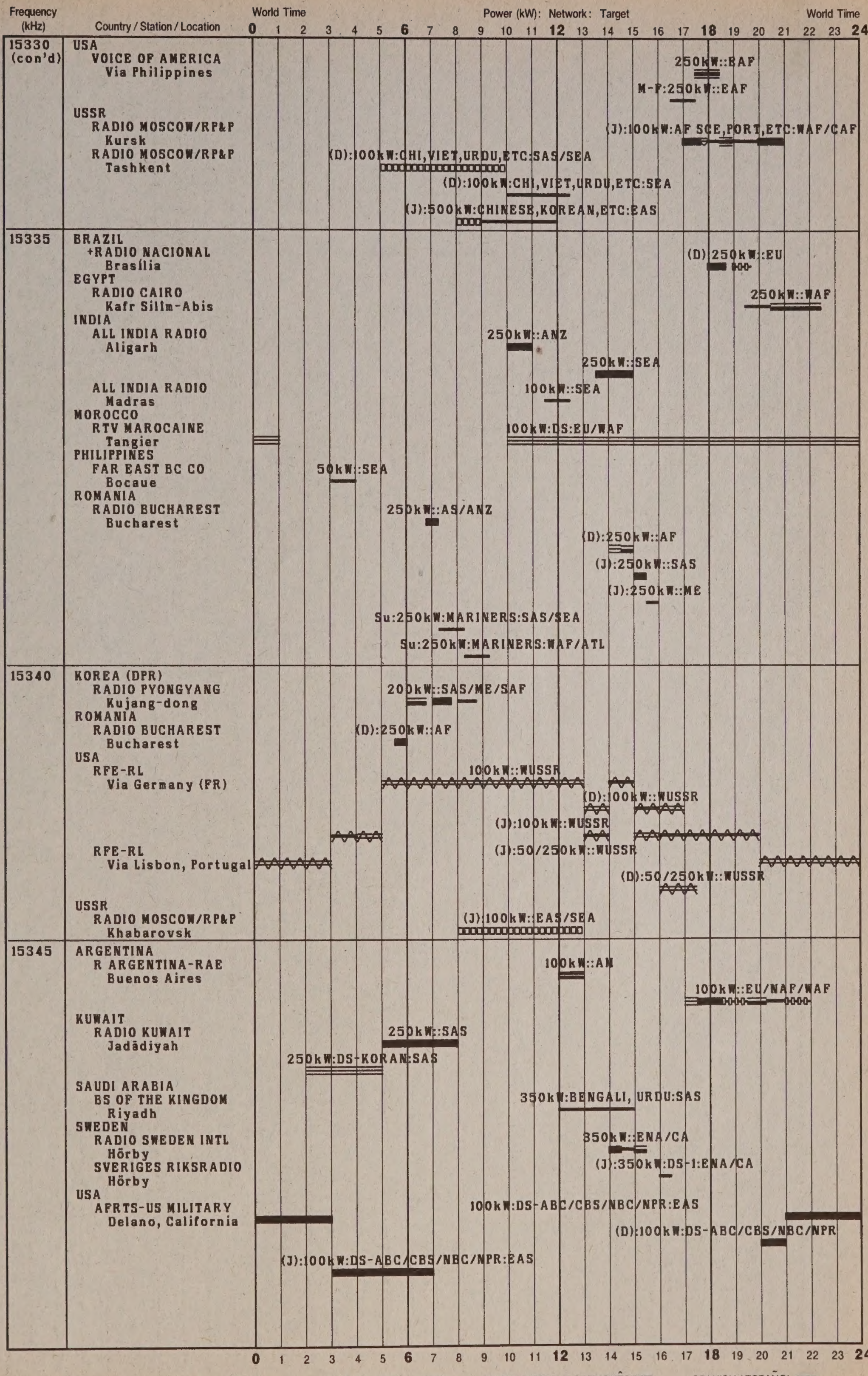
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ≡ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



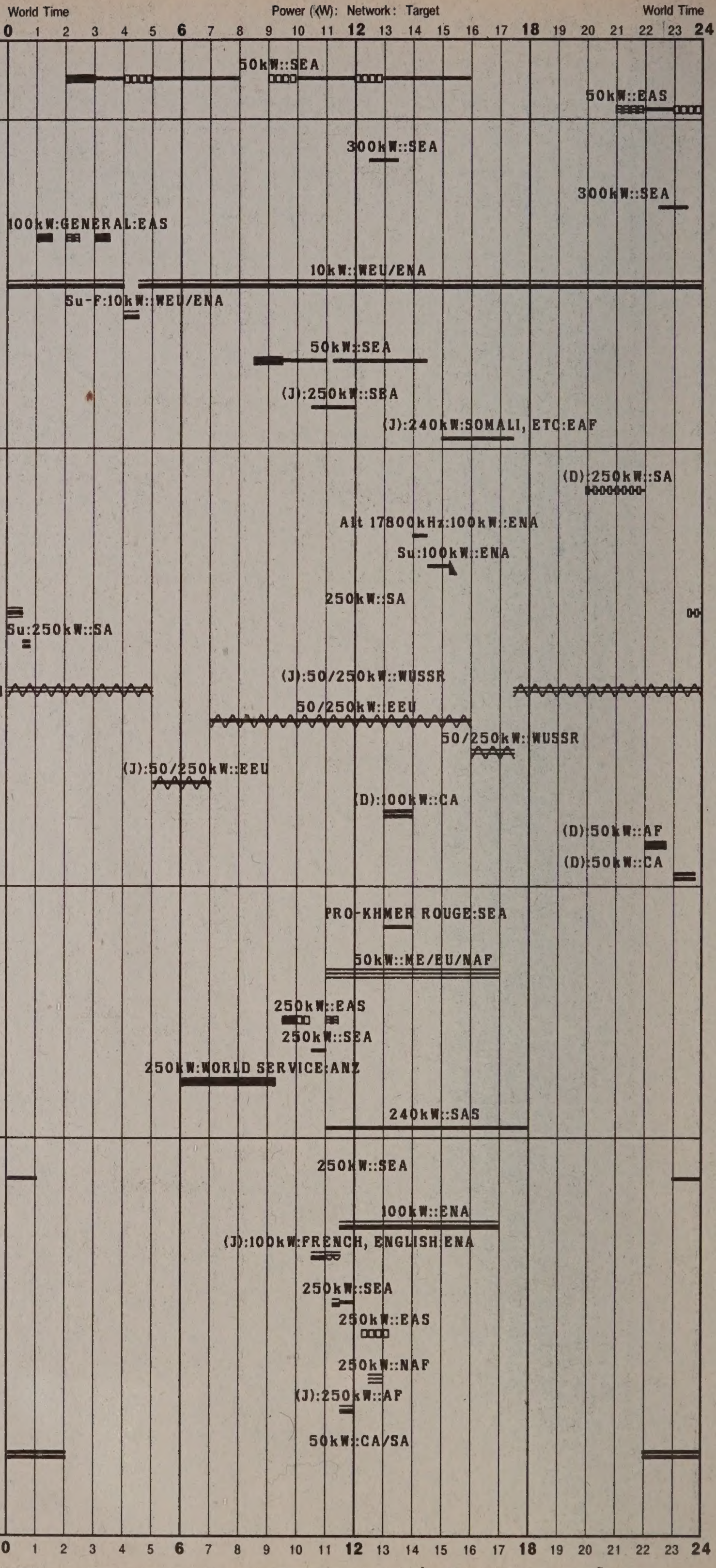
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15330 (con'd)	USA VOICE OF AMERICA Via Philippines	250kW::EAF M-F:250kW::EAF
	USSR RADIO MOSCOW/RP&P Kursk	(J):100kW:AF SCE,PORT,ETC:WAF/CAF
	RADIO MOSCOW/RP&P Tashkent	(D):100kW:CHI,VIET,URDU,ETC:SAS/SEA (D):100kW:CHI,VIET,URDU,ETC:SEA (J):500kW:CHINESE,KOREAN,ETC:EAS
15335	BRAZIL +RADIO NACIONAL Brasília	(D):250kW::EU
	EGYPT RADIO CAIRO Kafr Silîm-Abis	250kW::WAF
	INDIA ALL INDIA RADIO Aligarh	250kW::ANZ 250kW::SEA
	ALL INDIA RADIO Madras	100kW::SEA
	MOROCCO RTV MAROCAINE Tangier	100kW:DS:EU/WAF
	PHILIPPINES FAR EAST BC CO Bocaue	50kW::SEA
	ROMANIA RADIO BUCHAREST Bucharest	250kW::AS/ANZ (D):250kW::AF (J):250kW::SAS (J):250kW::ME Su:250kW:MARINERS:SAS/SEA Su:250kW:MARINERS:WAF/ATL
15340	KOREA (DPR) RADIO PYONGYANG Kujang-dong	200kW::SAS/ME/SAF
	ROMANIA RADIO BUCHAREST Bucharest	(D):250kW::AF
	USA RFE-RL Via Germany (FR)	100kW::WUSSR (D):100kW::WUSSR (J):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR (D):50/250kW::WUSSR
	USSR RADIO MOSCOW/RP&P Khabarovsk	(J):100kW::EAS/SEA
15345	ARGENTINA R ARGENTINA-RAE Buenos Aires	100kW::AM 100kW::EU/NAF/WAF
	KUWAIT RADIO KUWAIT Jadādiyah	250kW::SAS 250kW:DS-KORAN:SAS
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:BENGALI, URDU:SAS
	SWEDEN RADIO SWEDEN INTL Hörby	350kW::ENA/CA
	SVERIGES RIKSRADIO Hörby	(J):350kW:DS-1:ENA/CA
	USA AFRTS-US MILITARY Delano, California	100kW:DS-ABC/CBS/NBC/NPR:EAS (D):100kW:DS-ABC/CBS/NBC/NPR (J):100kW:DS-ABC/CBS/NBC/NPR:EAS

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡

ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ≡ OTHER —

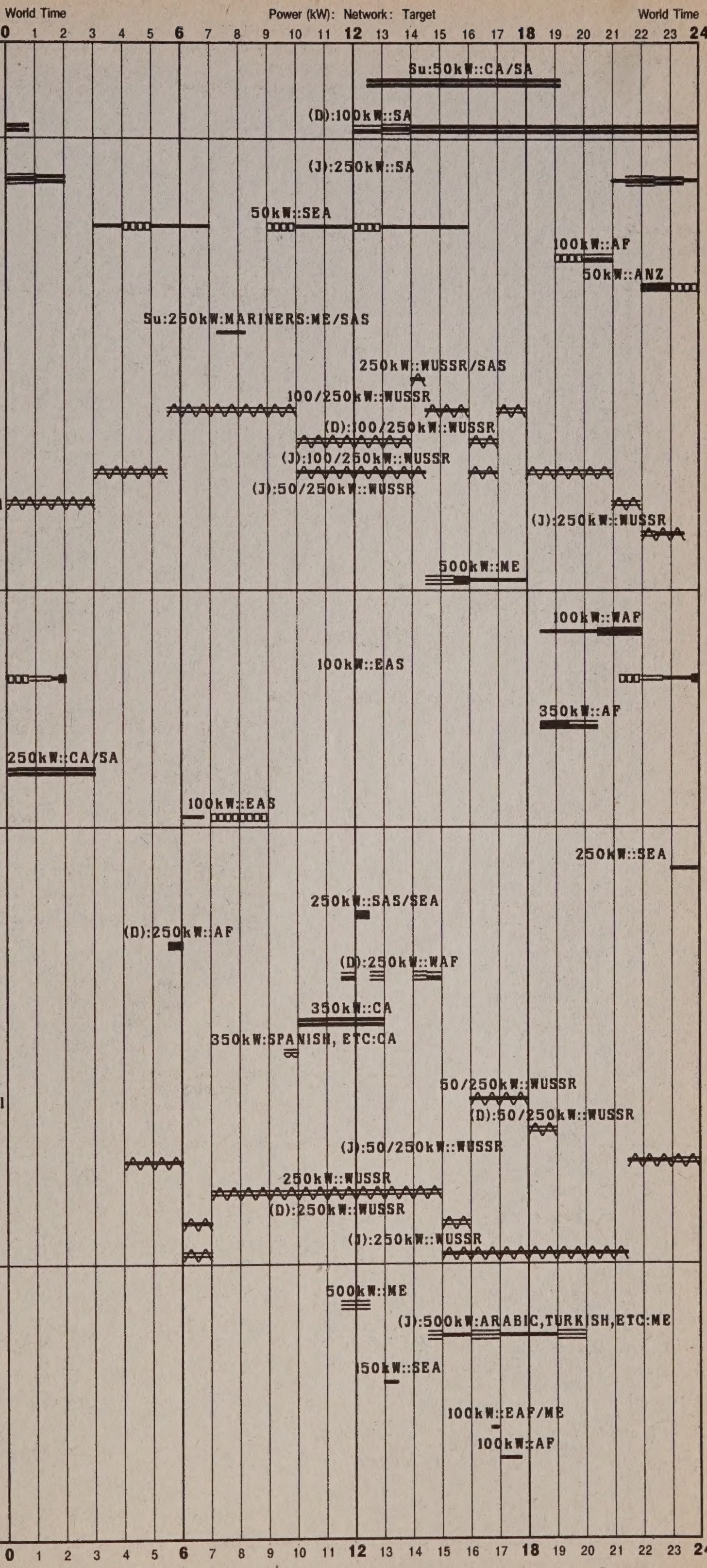
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15345.2	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	50kW::SEA 50kW::EAS
15350	HOLLAND RADIO NEDERLAND Via Madagascar	300kW::SEA
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	300kW::SEA 100kW:GENERAL:EAS
	LUXEMBOURG RADIO LUXEMBOURG Junglinster	10kW::WEU/ENA Su-F:10kW::WEU/ENA
	PHILIPPINES FAR EAST BC CO Bocaue	50kW::SEA
	USSR RADIO MOSCOW/RP&P Irkutsk	(J):250kW::SEA
	RADIO MOSCOW/RP&P Kazan'	(J):240kW:SOMALI, ETC:EAF
15355	GERMANY (FR) DEUTSCHE WELLE Via Antigua	(D):250kW::SA
	ITALY RTV ITALIANA Rome	Alt 17800kHz:100kW::ENA Su:100kW::ENA
	NETHERLANDS ANTILLES TRANS WORLD RADIO Bonaire	250kW::SA Su:250kW::SA
	USA RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR 50/250kW::EEU 50/250kW::WUSSR (J):50/250kW::EEU
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::CA (D):50kW::AF (D):50kW::CA
15360	CLANDESTINE (ASIA) "VO DEM KAMPUCHEA" China (PR)	PRO-KHMER ROUGE:SEA
	MOROCCO RTV MAROCAINE Tangier	50kW::ME/EU/NAF
	UNITED KINGDOM BBC Via Singapore	250kW::EAS 250kW::SEA 250kW:WORLD SERVICE:ANZ
	USSR RADIO MOSCOW/RP&P Moscow	240kW::SAS
15365	AUSTRALIA RADIO AUSTRALIA Darwin	250kW::SEA
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::ENA (J):100kW:FRENCH, ENGLISH:ENA
	INDIA ALL INDIA RADIO Aligarh	250kW::SEA 250kW::EAS
	ROMANIA RADIO BUCHAREST Bucharest	250kW::NAF (J):250kW::AF
(con'd)	SPAIN R EXTERIOR ESPANA Via Canary Is	50kW::CA/SA



ENGLISH ■ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ═
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▤ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15365 (con'd)	SPAIN R EXTERIOR ESPANA Via Canary Is	Su:50kW::CA/SA
	USA WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::SA
15370	BULGARIA RADIO SOFIA Rebrovo-Sofia	(J):250kW::SA
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	50kW::SEA 100kW::AF 50kW::ANZ
	ROMANIA RADIO BUCHAREST Bucharest	Su:250kW:MARINERS:ME/SAS
	USA R FREE AFGHANISTAN Via Germany (FR)	250kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	100/250kW::WUSSR (D):100/250kW::WUSSR (J):100/250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(J):250kW::WUSSR
	USSR RADIO MOSCOW/RP&P Novosibirsk	500kW::ME
15375	EGYPT RADIO CAIRO Abu Za'bal	100kW::WAF
	KOREA (REPUBLIC) RADIO KOREA In-Kimjae	100kW::EAS
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::AF
	USA VOICE OF AMERICA Dixon, California	250kW::CA/SA
	USSR RADIO MOSCOW/RP&P Kenga	100kW::EAS
15380	AUSTRALIA RADIO AUSTRALIA Carnarvon	250kW::SEA
	ROMANIA RADIO BUCHAREST Bucharest	250kW::SAS/SEA (D):250kW::AF (D):250kW::WAF
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::CA 350kW:SPANISH, ETC:CA
	USA RFE-RL Via Lisbon, Portugal	50/250kW::WUSSR (D):50/250kW::WUSSR (J):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	250kW::WUSSR (D):250kW::WUSSR (J):250kW::WUSSR
15385	BULGARIA RADIO SOFIA Plovdiv	500kW::ME (J):500kW:ARABIC,TURKISH,ETC:ME
	CHINA (PR) RADIO BEIJING Xi'an	150kW::SEA
	ITALY RTV ITALIANA Rome	100kW::EAF/ME 100kW::AF
(con'd)		



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ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭▭▭ OTHER —

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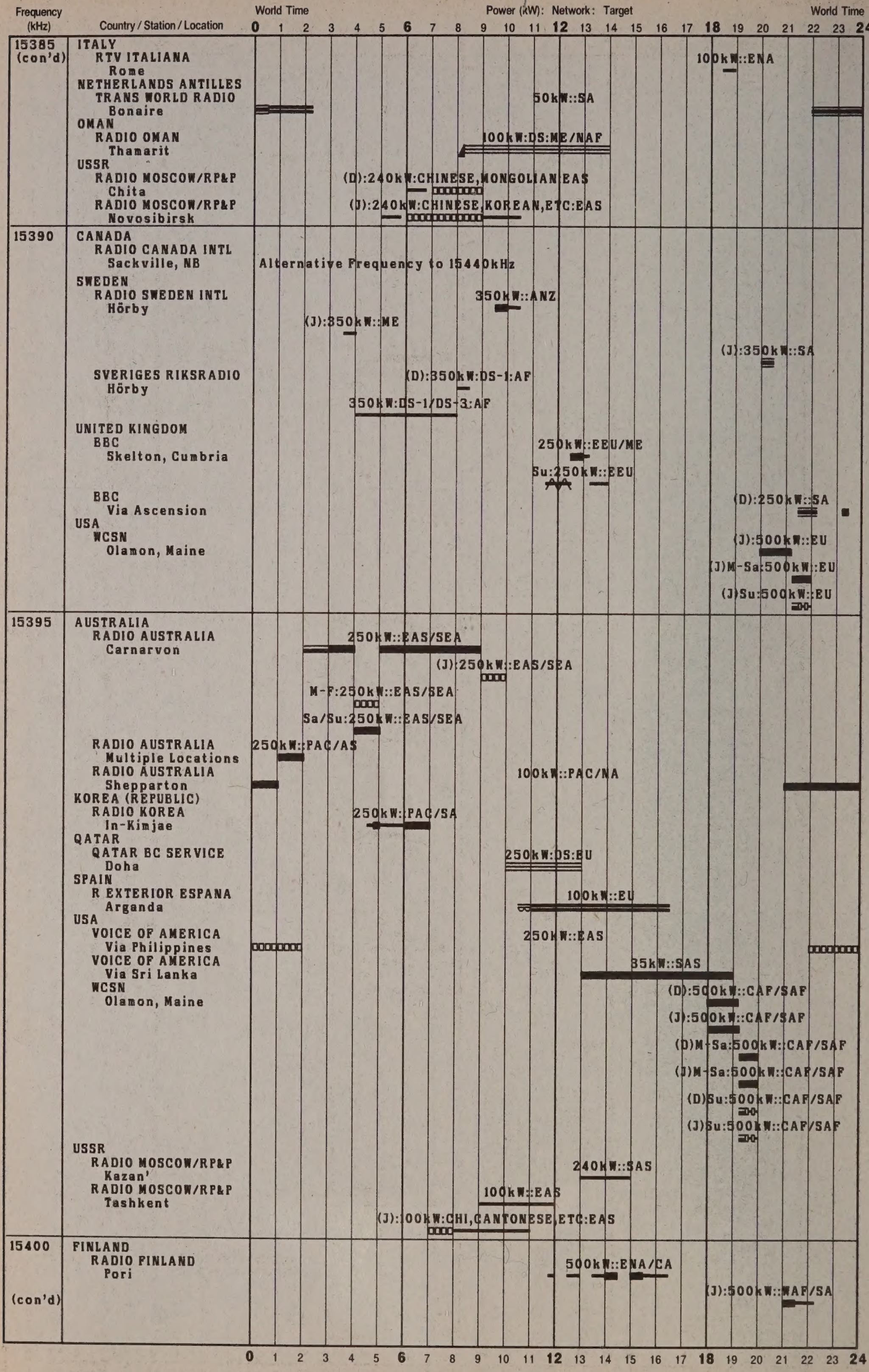

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15385 (con'd)	ITALY	
	RTV ITALIANA Rome	100kW::ENA
	NETHERLANDS ANTILLES	
	TRANS WORLD RADIO Bonaire	50kW::SA
	OMAN	
	RADIO OMAN Thamarit	100kW:DS:ME/NAF
	USSR	
	RADIO MOSCOW/RP&P Chita	(D):240kW:CHINESE,MONGOLIAN:EAS
	RADIO MOSCOW/RP&P Novosibirsk	(J):240kW:CHINESE,KOREAN,ETC:EAS
15390	CANADA	
	RADIO CANADA INTL Sackville, NB	Alternative Frequency to 15440kHz
	SWEDEN	
	RADIO SWEDEN INTL Hörby	350kW::ANZ
		(J):350kW::ME
		(J):350kW::SA
	SVERIGES RIKSRADIO Hörby	(D):350kW:DS-1:AF
		350kW:DS-1/DS-3:AF
	UNITED KINGDOM	
	BBC Skelton, Cumbria	250kW::EEU/ME
		Su:250kW::EEU
	BBC Via Ascension	(D):250kW::SA
	USA	
	WCSN Olamon, Maine	(J):500kW::EU
		(J)M-Sa:500kW::EU
		(J)Su:500kW::EU
15395	AUSTRALIA	
	RADIO AUSTRALIA Carnarvon	250kW::EAS/SEA
		(J):250kW::EAS/SEA
		M-F:250kW::EAS/SEA
		Sa/Su:250kW::EAS/SEA
	RADIO AUSTRALIA Multiple Locations	250kW::PAC/AS
	RADIO AUSTRALIA Shepparton	100kW::PAC/NA
	KOREA (REPUBLIC)	
	RADIO KOREA In-Kimjae	250kW::PAC/SA
	QATAR	
	QATAR BC SERVICE Doha	250kW:DS:EU
	SPAIN	
	R EXTERIOR ESPANA Arganda	100kW::EU
	USA	
	VOICE OF AMERICA Via Philippines	250kW::EAS
	VOICE OF AMERICA Via Sri Lanka	35kW::SAS
	WCSN Olamon, Maine	(D):500kW::CAF/SAF
		(J):500kW::CAF/SAF
		(D)M-Sa:500kW::CAF/SAF
		(J)M-Sa:500kW::CAF/SAF
		(D)Su:500kW::CAF/SAF
		(J)Su:500kW::CAF/SAF
	USSR	
	RADIO MOSCOW/RP&P Kazan'	240kW::SAS
	RADIO MOSCOW/RP&P Tashkent	100kW::EAS
		(J):100kW:CHI,CANTONESE,ETC:EAS
15400	FINLAND	
	RADIO FINLAND Pori	500kW::ENA/CA
(con'd)		(J):500kW::WAF/SA

ENGLISH GERMAN / DEUTSCH FRENCH / FRANÇAIS PORTUGUESE / PORTUGUÊS SPANISH / ESPAÑOL
ARABIC / عربي RUSSIAN / РУССКИЙ CHINESE / 中文 JAPANESE / 日本語 MULTILINGUAL OTHER
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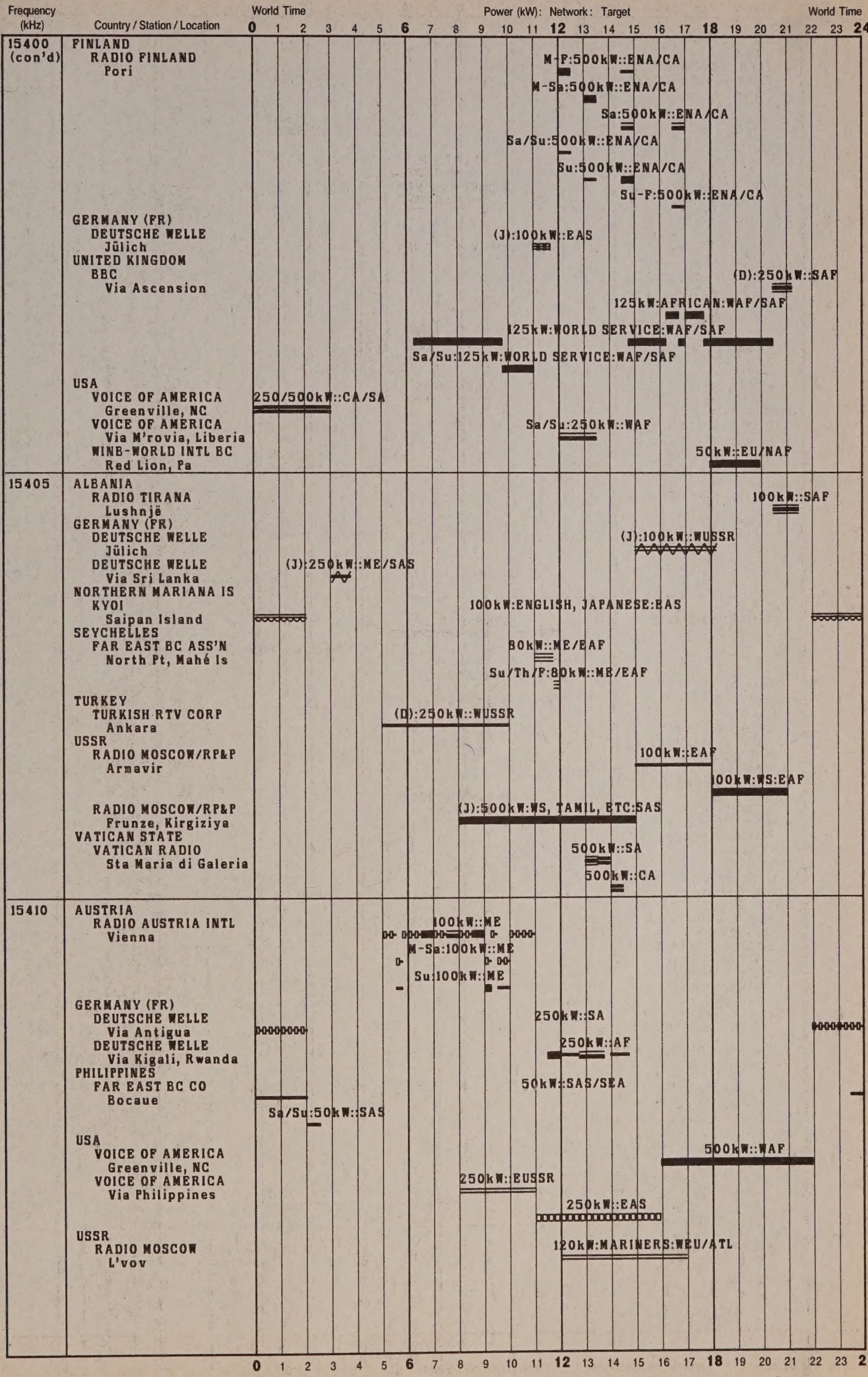
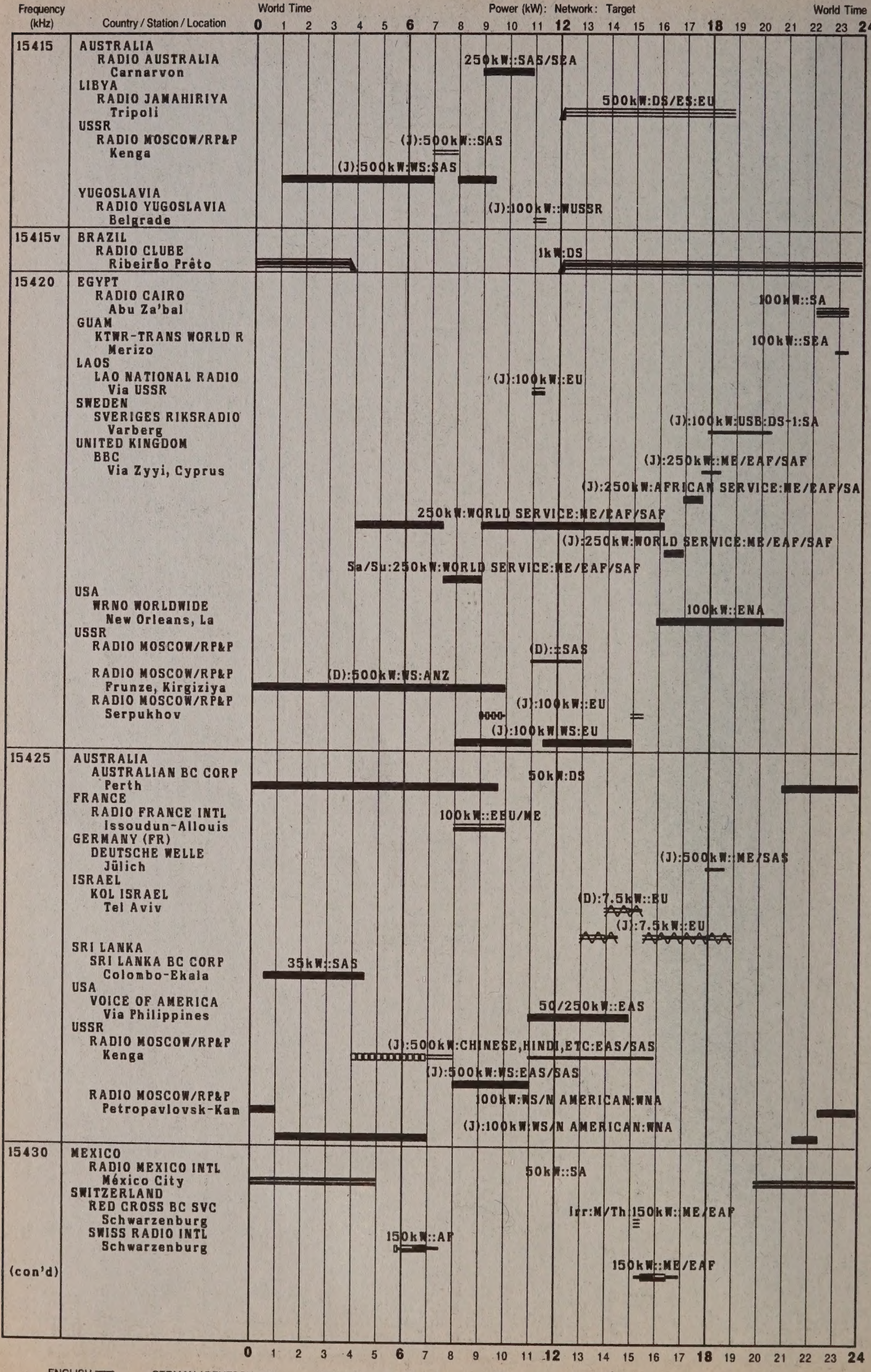


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target (World Time 0–24)
15400 (con'd)	FINLAND RADIO FINLAND Pori	M-F:500kW::ENA/CA M-Sa:500kW::ENA/CA Sa:500kW::ENA/CA Sa/Su:500kW::ENA/CA Su:500kW::ENA/CA Su-F:500kW::ENA/CA
	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::EAS
	UNITED KINGDOM BBC Via Ascension	(D):250kW::SAF 125kW:AFRICAN:WAF/SAF 125kW:WORLD SERVICE:WAF/SAF Sa/Su:125kW:WORLD SERVICE:WAF/SAF
	USA VOICE OF AMERICA Greenville, NC	250/500kW::CA/SA
	VOICE OF AMERICA Via M'rovia, Liberia	Sa/Su:250kW::WAF
	WINB-WORLD INTL BC Red Lion, Pa	50kW::EU/NAF
15405	ALBANIA RADIO TIRANA Lushnjë	100kW::SAF
	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::WUSSR
	DEUTSCHE WELLE Via Sri Lanka	(J):250kW::ME/SAS
	NORTHERN MARIANA IS KYOI Saipan Island	100kW:ENGLISH, JAPANESE:EAS
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::ME/EAF Su/Th/F:80kW::ME/EAF
	TURKEY TURKISH RTV CORP Ankara	(D):250kW::WUSSR
	USSR RADIO MOSCOW/RP&P Armavir	100kW::EAF 100kW:WS:EAF
	RADIO MOSCOW/RP&P Frunze, Kirgiziya	(J):500kW:WS, TAMIL, ETC:SAS
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	500kW::SA 500kW::CA
15410	AUSTRIA RADIO AUSTRIA INTL Vienna	100kW::ME M-Sa:100kW::ME Su:100kW::ME
	GERMANY (FR) DEUTSCHE WELLE Via Antigua	250kW::SA
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::AF
	PHILIPPINES FAR EAST BC CO Bocaue	50kW::SAS/SEA Sa/Su:50kW::SAS
	USA VOICE OF AMERICA Greenville, NC	500kW::WAF
	VOICE OF AMERICA Via Philippines	250kW::EUSSR 250kW::EAS
	USSR RADIO MOSCOW L'vov	120kW:MARINERS:WEU/ATL

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ☰ PORTUGUESE / PORTUGUÊS ▤ SPANISH / ESPAÑOL ▤
ARABIC / عربي ☰ RUSSIAN / РУССКИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▤ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15415	AUSTRALIA RADIO AUSTRALIA Carnarvon	250kW::SAS/SEA
	LIBYA RADIO JAMAHIRIYA Tripoli	500kW:DS/ES:EU
	USSR RADIO MOSCOW/RP&P Kenga	(J):500kW::SAS (J):500kW:WS:SAS
	YUGOSLAVIA RADIO YUGOSLAVIA Belgrade	(J):100kW::WUSSR
15415v	BRAZIL RADIO CLUBE Ribeirão Prêto	1kW:DS
15420	EGYPT RADIO CAIRO Abu Za'bal	100kW::SA
	GUAM KTWR-TRANS WORLD R Merizo	100kW::SEA
	LAOS LAO NATIONAL RADIO Via USSR	(J):100kW::EU
	SWEDEN SVERIGES RIKSRADIO Varberg	(J):100kW:USB:DS-1:SA
	UNITED KINGDOM BBC Via Zyyi, Cyprus	(J):250kW::ME/EAF/SAF (J):250kW:AFRICAN SERVICE:ME/EAF/SA 250kW:WORLD SERVICE:ME/EAF/SAF (J):250kW:WORLD SERVICE:ME/EAF/SAF Sa/Su:250kW:WORLD SERVICE:ME/EAF/SAF
	USA WRNO WORLDWIDE New Orleans, La	100kW::ENA
	USSR RADIO MOSCOW/RP&P	(D)::SAS
	RADIO MOSCOW/RP&P Frunze, Kirgiziya	(D):500kW:WS:ANZ
	RADIO MOSCOW/RP&P Serpukhov	(J):100kW::EU (J):100kW:WS:EU
15425	AUSTRALIA AUSTRALIAN BC CORP Perth	50kW:DS
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EEU/ME
	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):500kW::ME/SAS
	ISRAEL KOL ISRAEL Tel Aviv	(D):7.5kW::EU (J):7.5kW::EU
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	35kW::SAS
	USA VOICE OF AMERICA Via Philippines	50/250kW::EAS
	USSR RADIO MOSCOW/RP&P Kenga	(J):500kW:CHINESE,HINDI,ETC:EAS/SAS (J):500kW:WS:EAS/SAS
	RADIO MOSCOW/RP&P Petropavlovsk-Kam	100kW:WS/N AMERICAN:WNA (J):100kW:WS/N AMERICAN:WNA
15430	MEXICO RADIO MEXICO INTL México City	50kW::SA
	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:M/Th:150kW::ME/EAF
	SWISS RADIO INTL Schwarzenburg	150kW::AF 150kW::ME/EAF
(con'd)		

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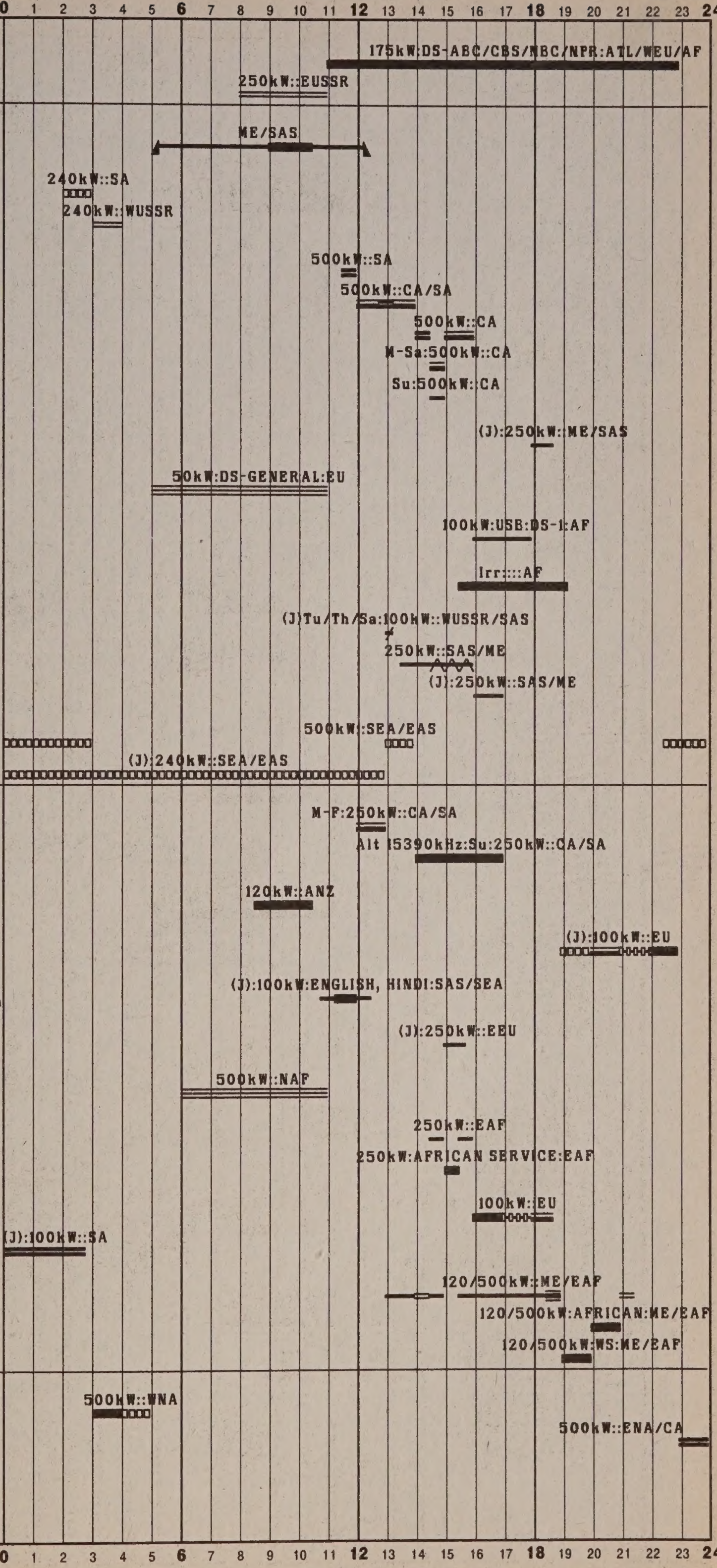

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15430 (con'd)	**USA** AFRTS-US MILITARY Cincinnati, Ohio	175kW:DS-ABC/CBS/NBC/NPR:ATL/WEU/AF
	VOICE OF AMERICA Via Philippines	250kW::EUSSR
15435	**AFGHANISTAN** RADIO AFGHANISTAN Via USSR	ME/SAS
	CHINA (PR) RADIO BEIJING Beijing	240kW::SA 240kW::WUSSR
	FRANCE RADIO FRANCE INTL Via French Guiana	500kW::SA 500kW::CA/SA 500kW::CA M-Sa:500kW::CA Su:500kW::CA
	GERMANY (FR) DEUTSCHE WELLE Via Sri Lanka	(J):250kW::ME/SAS
	SAUDI ARABIA BS OF THE KINGDOM Jiddah	50kW:DS-GENERAL:EU
	SWEDEN SVERIGES RIKSRADIO Varberg	100kW:USB:DS-1:AF
	TANZANIA RADIO TANZANIA Dar es Salaam	Irr:::AF
	USA R FREE AFGHANISTAN Via Biblis, GFR	(J)Tu/Th/Sa:100kW::WUSSR/SAS
	VOICE OF AMERICA Via Kaválla, Greece	250kW::SAS/ME (J):250kW::SAS/ME
	USSR RADIO MOSCOW/RP&P Frunze, Kirgiziya	500kW::SEA/EAS (J):240kW::SEA/EAS
15440	**CANADA** RADIO CANADA INTL Sackville, NB	M-F:250kW::CA/SA Alt 15390kHz:Su:250kW::CA/SA
	CHINA (PR) RADIO BEIJING Kunming	120kW::ANZ
	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(J):100kW::EU
	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	(J):100kW:ENGLISH, HINDI:SAS/SEA
	GERMANY (FR) DEUTSCHE WELLE Via Sines, Portugal	(J):250kW::EEU
	IRAQ RADIO BAGHDAD Balad-Salah el Deen	500kW::NAF
	UNITED KINGDOM BBC Via Zyyi, Cyprus	250kW::EAF 250kW:AFRICAN SERVICE:EAF
	USA WYFR-FAMILY RADIO Okeechobee,Florida	100kW::EU (J):100kW::SA
	USSR RADIO MOSCOW/RP&P Ryazan'	120/500kW::ME/EAF 120/500kW:AFRICAN:ME/EAF 120/500kW:WS:ME/EAF
15445 (con'd)	**CHINA (PR)** RADIO BEIJING Jinhua	500kW::WNA 500kW::ENA/CA

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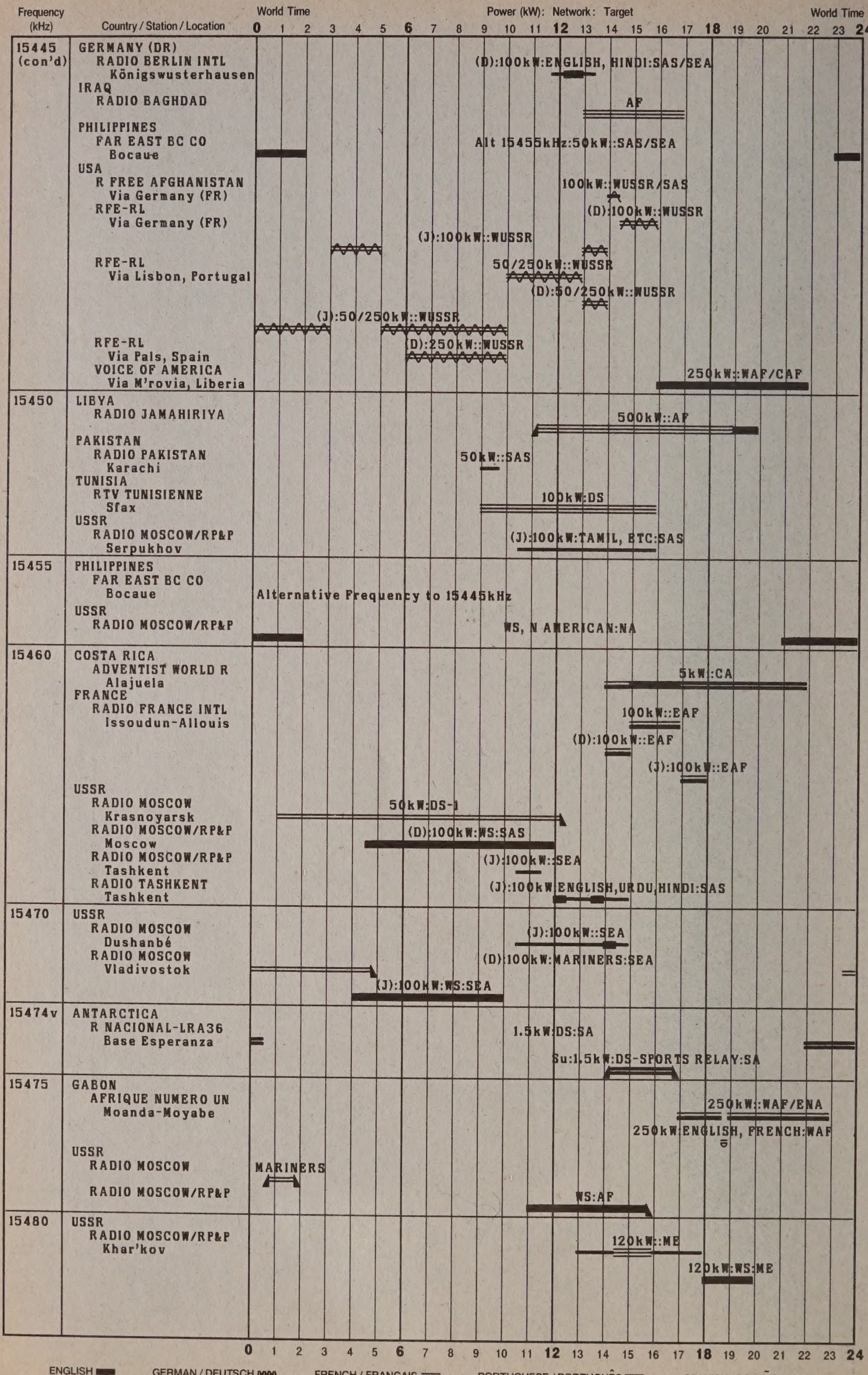

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15445 (con'd)	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	(D):100kW:ENGLISH, HINDI:SAS/SEA
	IRAQ RADIO BAGHDAD	AF
	PHILIPPINES FAR EAST BC CO Bocaue	Alt 15455kHz:50kW::SAS/SEA
	USA R FREE AFGHANISTAN Via Germany (FR)	100kW::WUSSR/SAS
	RFE-RL Via Germany (FR)	(D):100kW::WUSSR (J):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	50/250kW::WUSSR (D):50/250kW::WUSSR (J):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/CAF
15450	LIBYA RADIO JAMAHIRIYA	500kW::AF
	PAKISTAN RADIO PAKISTAN Karachi	50kW::SAS
	TUNISIA RTV TUNISIENNE Sfax	100kW:DS
	USSR RADIO MOSCOW/RP&P Serpukhov	(J):100kW:TAMIL, ETC:SAS
15455	PHILIPPINES FAR EAST BC CO Bocaue	Alternative Frequency to 15445kHz
	USSR RADIO MOSCOW/RP&P	WS, N AMERICAN:NA
15460	COSTA RICA ADVENTIST WORLD R Alajuela	5kW::CA
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EAF (D):100kW::EAF (J):100kW::EAF
	USSR RADIO MOSCOW Krasnoyarsk	50kW:DS-1
	RADIO MOSCOW/RP&P Moscow	(D):100kW:WS:SAS
	RADIO MOSCOW/RP&P Tashkent	(J):100kW::SEA
	RADIO TASHKENT Tashkent	(J):100kW:ENGLISH,URDU,HINDI:SAS
15470	USSR RADIO MOSCOW Dushanbé	(J):100kW::SEA
	RADIO MOSCOW Vladivostok	(D):100kW:MARINERS:SEA (J):100kW:WS:SEA
15474v	ANTARCTICA R NACIONAL-LRA36 Base Esperanza	1.5kW:DS:SA Su:1.5kW:DS-SPORTS RELAY:SA
15475	GABON AFRIQUE NUMERO UN Moanda-Moyabe	250kW::WAF/ENA 250kW:ENGLISH, FRENCH:WAF
	USSR RADIO MOSCOW	MARINERS
	RADIO MOSCOW/RP&P	WS:AF
15480	USSR RADIO MOSCOW/RP&P Khar'kov	120kW::ME 120kW:WS:ME

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Frequency (kHz)	Country / Station / Location	World Time 0–24 · Power (kW): Network: Target
15485	ISRAEL KOL ISRAEL Tel Aviv	(D):300kW::WUSSR/EEU (J):300kW::WUSSR/EEU (J):300kW::EU/NAF/CA (J)Sa/Su:300kW::WUSSR/EEU
	USSR RADIO MOSCOW Kiev	100kW::WEU/WAF
15490	USSR RADIO MOSCOW Irkutsk	15kW:USB:DS-1(FEEDER)
	RADIO MOSCOW/RP&P Minsk	100kW:WS:ME
	RADIO MOSCOW/RP&P Moscow	(J):240kW::EAF/SAF
	RADIO MOSCOW/RP&P Tula	(J):240kW::SAS/SEA 240kW:WS:SAS/SEA (J):240kW:WS:SAS/SEA
15495	KUWAIT RADIO KUWAIT Jadādiyah	Irr::500kW:DS-RAMADAN:SEA/ANZ 500kW:DS-HOLY KORAN:SEA/ANZ 500kW:DS-MAIN PROGRAM:SEA/ANZ
	USSR RADIO MOSCOW Kiev	100kW::WEU/WAF
15500	CHINA (PR) CENTRAL PEOPLES BS Beijing	120kW:DS-2 Th/Sa-Tu:120kW:DS-2
	USSR RADIO MOSCOW/RP&P Frunze	100kW::SEA
	RADIO MOSCOW/RP&P Frunze, Kirgiziya	(J):100kW:WS,VIETNAMESE,ETC:SEA
	RADIO MOSCOW/RP&P Moscow	(J):240kW:WS:ME (D):240kW:WS, PERSIAN:ME
	RADIO MOSCOW/RP&P Yerevan	(J):120kW:AFRICAN SCE,WS,ETC:EAF/SAF
15505	KUWAIT RADIO KUWAIT Jadādiyah	250kW:DS-MAIN PROGRAM:EU (J):250kW:DS-MAIN PROGRAM:EU Irr::250kW:DS-RAMADAN:EU 250kW:DS-SPECIAL PROGRAM:EU
	USSR RADIO MOSCOW/RP&P	EU
	RADIO MOSCOW/RP&P Kazan'	240kW::SAS
15510	BELGIUM BELGISCHE RADIO TV Wavre	M-F:100/250kW::AF Sa/Su:100/250kW::AF Su:100/250kW::AF
	USSR RADIO MOSCOW/RP&P Frunze, Kirgiziya	(J):100kW:CHINESE,VIET,ETC:SAS/SEA
15515	BELGIUM BELGISCHE RADIO TV Wavre	(D):100/250kW::AS (J):100/250kW::AS (J)M-Sa:100/250kW::AS (J)M-Sa:100/250kW::AF (D)Su:100/250kW::AF
	USSR RADIO MOSCOW/RP&P Tashkent	100kW:WS:SAS/SEA
15520 (con'd)	AFGHANISTAN RADIO AFGHANISTAN Via USSR	(J):::ME

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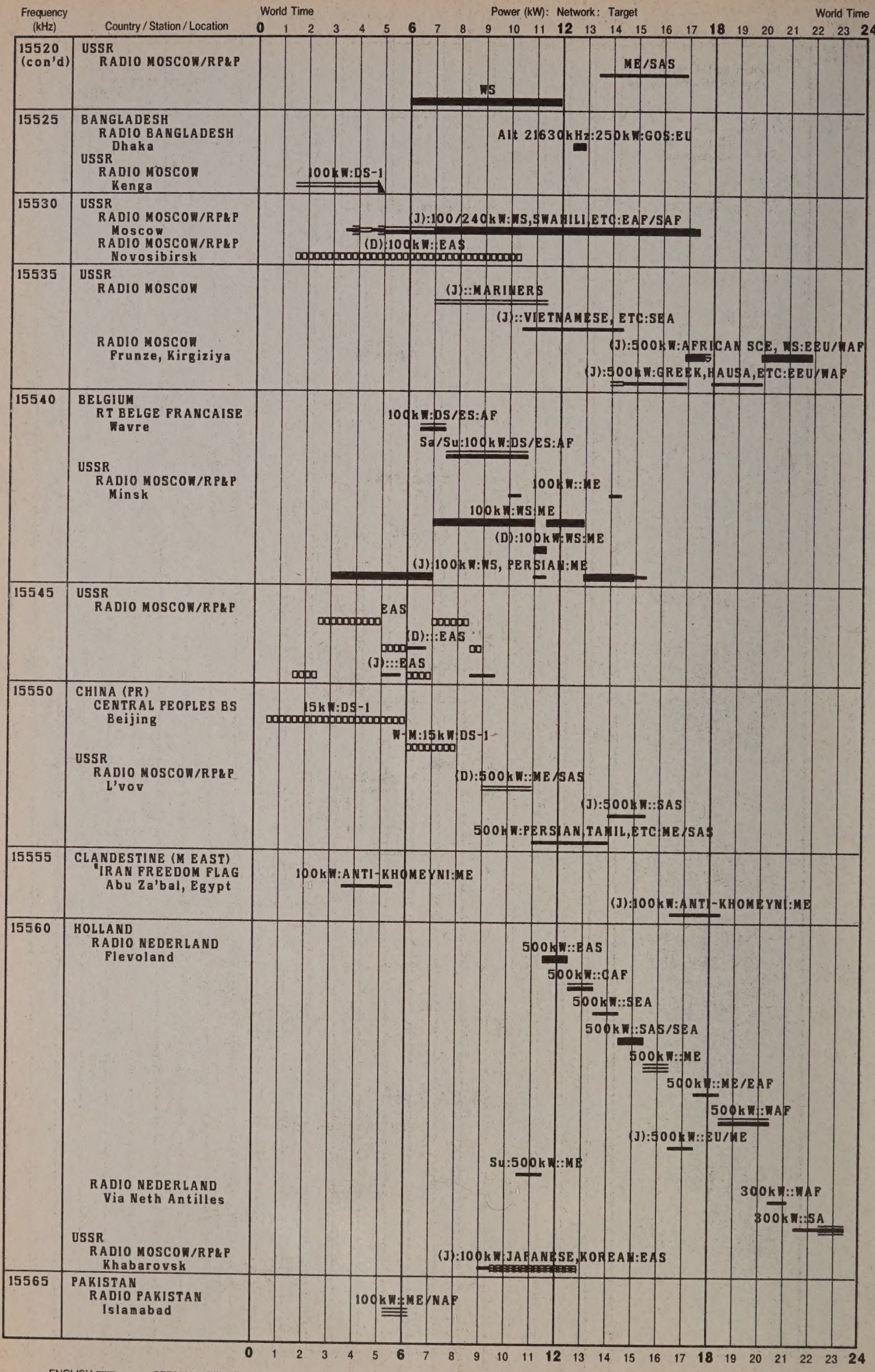

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15520 (con'd)	USSR RADIO MOSCOW/RP&P	ME/SAS WS
15525	BANGLADESH RADIO BANGLADESH Dhaka	Alt 21630kHz:250kW:GOS:EU
	USSR RADIO MOSCOW Kenga	100kW:DS-1
15530	USSR RADIO MOSCOW/RP&P Moscow	(J):100/240kW:WS,SWAHILI,ETC:EAF/SAF
	RADIO MOSCOW/RP&P Novosibirsk	(D):100kW::EAS
15535	USSR RADIO MOSCOW	(J)::MARINERS (J)::VIETNAMESE, ETC:SEA
	RADIO MOSCOW Frunze, Kirgiziya	(J):500kW:AFRICAN SCE, WS:EEU/WAF (J):500kW:GREEK,HAUSA,ETC:EEU/WAF
15540	BELGIUM RT BELGE FRANCAISE Wavre	100kW:DS/ES:AF Sa/Su:100kW:DS/ES:AF
	USSR RADIO MOSCOW/RP&P Minsk	100kW::ME 100kW:WS:ME (D):100kW:WS:ME (J):100kW:WS, PERSIAN:ME
15545	USSR RADIO MOSCOW/RP&P	EAS (D):::EAS (J):::EAS
15550	CHINA (PR) CENTRAL PEOPLES BS Beijing	15kW:DS-1 W-M:15kW:DS-1
	USSR RADIO MOSCOW/RP&P L'vov	(D):500kW::ME/SAS (J):500kW::SAS 500kW:PERSIAN,TAMIL,ETC:ME/SAS
15555	CLANDESTINE (M EAST) "IRAN FREEDOM FLAG Abu Za'bal, Egypt	100kW:ANTI-KHOMEYNI:ME (J):100kW:ANTI-KHOMEYNI:ME
15560	HOLLAND RADIO NEDERLAND Flevoland	500kW::EAS 500kW::CAF 500kW::SEA 500kW::SAS/SEA 500kW::ME 500kW::ME/EAF 500kW::WAF (J):500kW::EU/ME Su:500kW::ME
	RADIO NEDERLAND Via Neth Antilles	300kW::WAF 300kW::SA
	USSR RADIO MOSCOW/RP&P Khabarovsk	(J):100kW:JAPANESE,KOREAN:EAS
15565	PAKISTAN RADIO PAKISTAN Islamabad	100kW::ME/NAF

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ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭▭▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER ─
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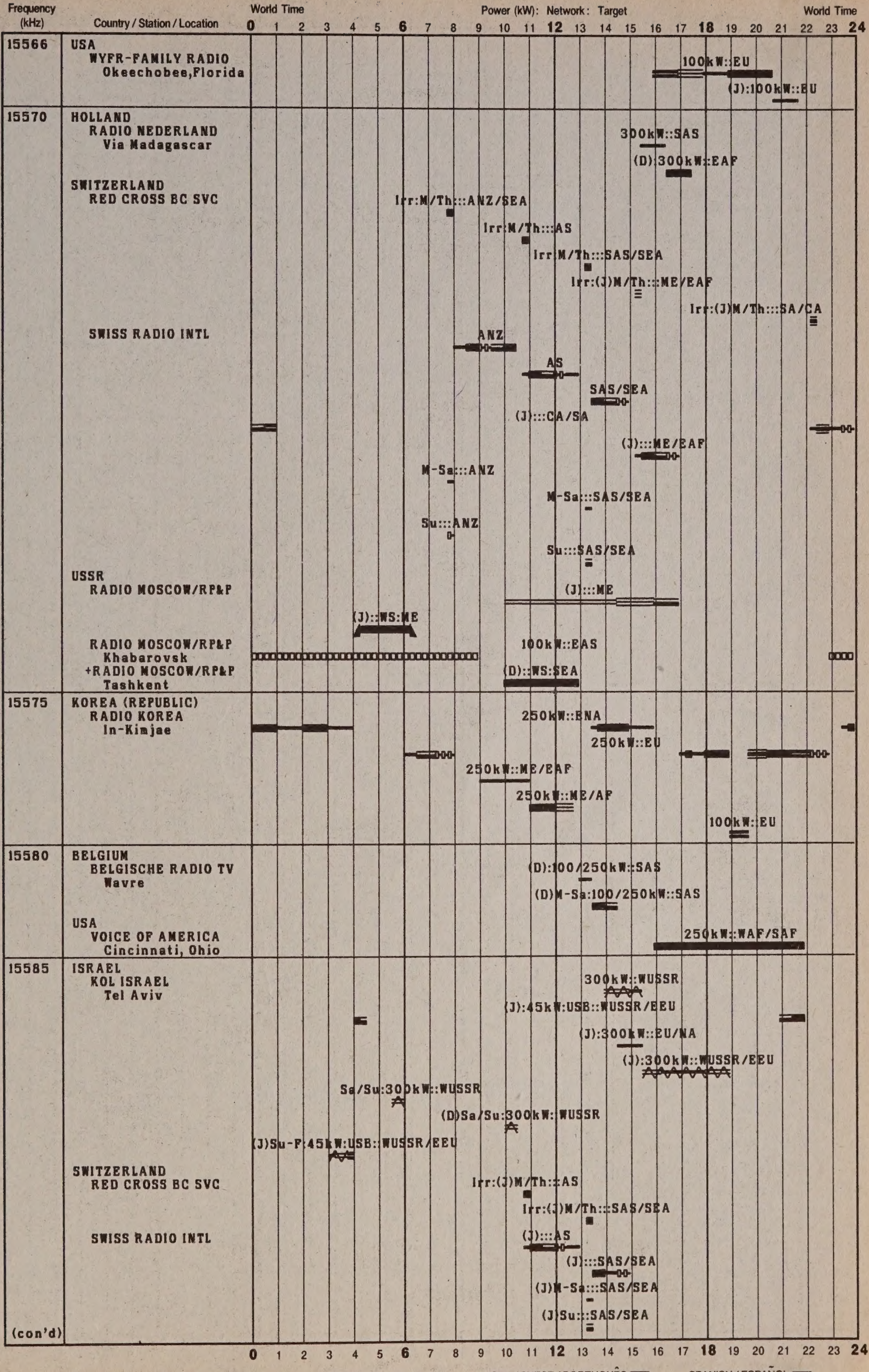

15566 USA
WYFR-FAMILY RADIO
Okeechobee,Florida

15570 HOLLAND
RADIO NEDERLAND
Via Madagascar
SWITZERLAND
RED CROSS BC SVC
SWISS RADIO INTL
USSR
RADIO MOSCOW/RP&P
RADIO MOSCOW/RP&P
Khabarovsk
+RADIO MOSCOW/RP&P
Tashkent

15575 KOREA (REPUBLIC)
RADIO KOREA
In-Kimjae

15580 BELGIUM
BELGISCHE RADIO TV
Wavre
USA
VOICE OF AMERICA
Cincinnati, Ohio

15585 ISRAEL
KOL ISRAEL
Tel Aviv
SWITZERLAND
RED CROSS BC SVC
SWISS RADIO INTL

(con'd)

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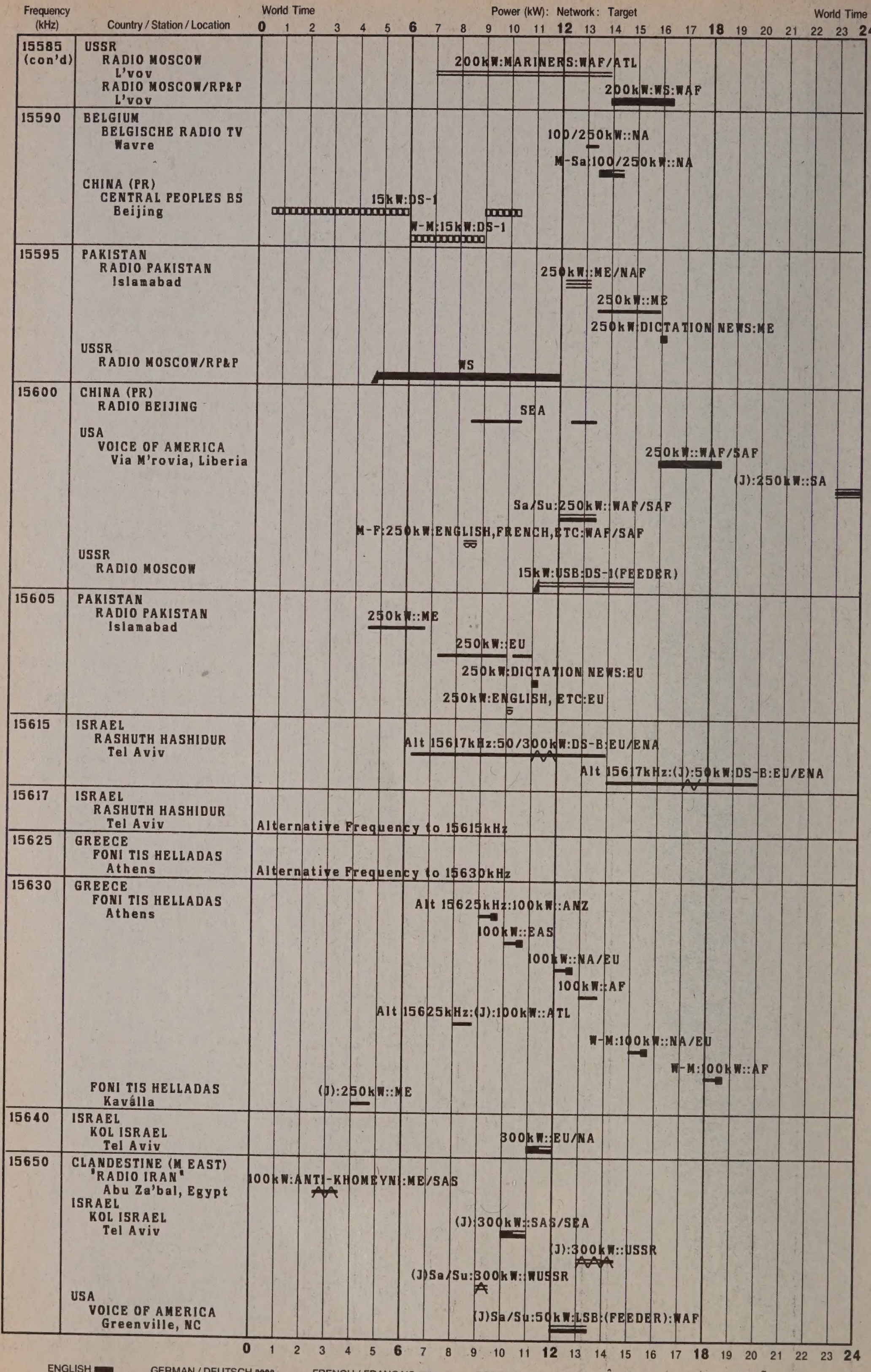

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15585 (con'd)	USSR RADIO MOSCOW L'vov	200kW:MARINERS:WAF/ATL
	RADIO MOSCOW/RP&P L'vov	200kW:WS:WAF
15590	BELGIUM BELGISCHE RADIO TV Wavre	100/250kW::NA M-Sa:100/250kW::NA
	CHINA (PR) CENTRAL PEOPLES BS Beijing	15kW:DS-1 W-M:15kW:DS-1
15595	PAKISTAN RADIO PAKISTAN Islamabad	250kW::ME/NAF 250kW::ME 250kW:DICTATION NEWS:ME
	USSR RADIO MOSCOW/RP&P	WS
15600	CHINA (PR) RADIO BEIJING	SEA
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/SAF (J):250kW::SA Sa/Su:250kW::WAF/SAF M-F:250kW:ENGLISH,FRENCH,ETC:WAF/SAF
	USSR RADIO MOSCOW	15kW:USB:DS-1(FEEDER)
15605	PAKISTAN RADIO PAKISTAN Islamabad	250kW::ME 250kW::EU 250kW:DICTATION NEWS:EU 250kW:ENGLISH, ETC:EU
15615	ISRAEL RASHUTH HASHIDUR Tel Aviv	Alt 15617kHz:50/300kW:DS-B:EU/ENA Alt 15617kHz:(J):50kW:DS-B:EU/ENA
15617	ISRAEL RASHUTH HASHIDUR Tel Aviv	Alternative Frequency to 15615kHz
15625	GREECE FONI TIS HELLADAS Athens	Alternative Frequency to 15630kHz
15630	GREECE FONI TIS HELLADAS Athens	Alt 15625kHz:100kW::ANZ 100kW::EAS 100kW::NA/EU 100kW::AF Alt 15625kHz:(J):100kW::ATL W-M:100kW::NA/EU W-M:100kW::AF
	FONI TIS HELLADAS Kavalla	(J):250kW::ME
15640	ISRAEL KOL ISRAEL Tel Aviv	300kW:EU/NA
15650	CLANDESTINE (M EAST) "RADIO IRAN" Abu Za'bal, Egypt	100kW:ANTI-KHOMEYNI:ME/SAS
	ISRAEL KOL ISRAEL Tel Aviv	(J):300kW::SAS/SEA (J):300kW::USSR (J)Sa/Su:300kW::WUSSR
	USA VOICE OF AMERICA Greenville, NC	(J)Sa/Su:50kW:LSB:(FEEDER):WAF

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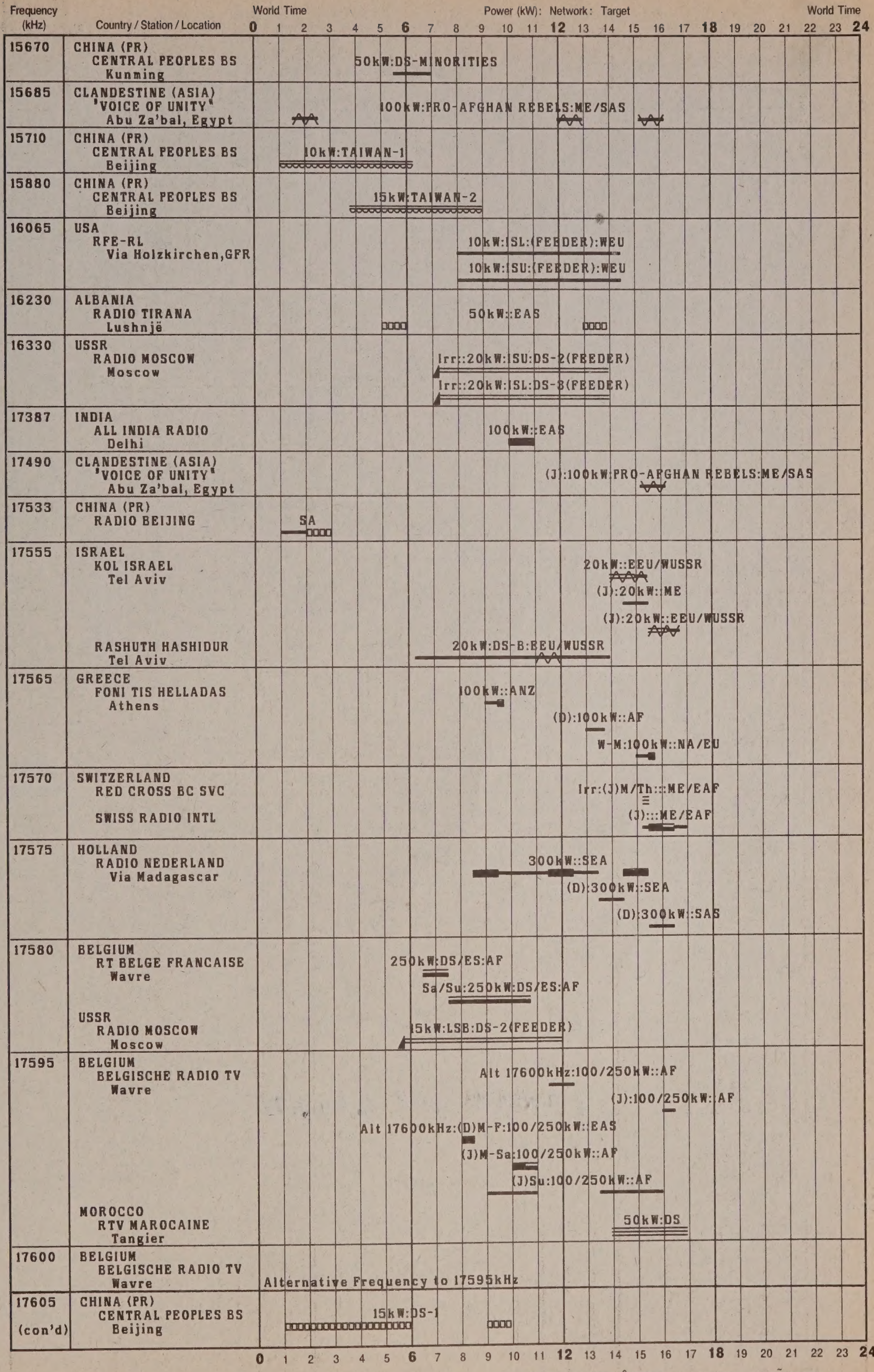

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
15670	CHINA (PR) CENTRAL PEOPLES BS Kunming	50kW:DS-MINORITIES
15685	CLANDESTINE (ASIA) 'VOICE OF UNITY' Abu Za'bal, Egypt	100kW:PRO-AFGHAN REBELS:ME/SAS
15710	CHINA (PR) CENTRAL PEOPLES BS Beijing	10kW:TAIWAN-1
15880	CHINA (PR) CENTRAL PEOPLES BS Beijing	15kW:TAIWAN-2
16065	USA RFE-RL Via Holzkirchen,GFR	10kW:ISL:(FEEDER):WEU 10kW:ISU:(FEEDER):WEU
16230	ALBANIA RADIO TIRANA Lushnjë	50kW::EAS
16330	USSR RADIO MOSCOW Moscow	Irr::20kW:ISU:DS-2(FEEDER) Irr::20kW:ISL:DS-3(FEEDER)
17387	INDIA ALL INDIA RADIO Delhi	100kW::EAS
17490	CLANDESTINE (ASIA) 'VOICE OF UNITY' Abu Za'bal, Egypt	(J):100kW:PRO-AFGHAN REBELS:ME/SAS
17533	CHINA (PR) RADIO BEIJING	SA
17555	ISRAEL KOL ISRAEL Tel Aviv	20kW::EEU/WUSSR (J):20kW::ME (J):20kW::EEU/WUSSR
	RASHUTH HASHIDUR Tel Aviv	20kW:DS-B:EEU/WUSSR
17565	GREECE FONI TIS HELLADAS Athens	100kW::ANZ (D):100kW::AF W-M:100kW::NA/EU
17570	SWITZERLAND RED CROSS BC SVC	Irr:(J)M/Th:::ME/EAF
	SWISS RADIO INTL	(J):::ME/EAF
17575	HOLLAND RADIO NEDERLAND Via Madagascar	300kW::SEA (D):300kW::SEA (D):300kW::SAS
17580	BELGIUM RT BELGE FRANCAISE Wavre	250kW:DS/ES:AF Sa/Su:250kW:DS/ES:AF
	USSR RADIO MOSCOW Moscow	15kW:LSB:DS-2(FEEDER)
17595	BELGIUM BELGISCHE RADIO TV Wavre	Alt 17600kHz:100/250kW::AF (J):100/250kW::AF Alt 17600kHz:(D)M-F:100/250kW::EAS (J)M-Sa:100/250kW::AF (J)Su:100/250kW::AF
	MOROCCO RTV MAROCAINE Tangier	50kW:DS
17600	BELGIUM BELGISCHE RADIO TV Wavre	Alternative Frequency to 17595kHz
17605 (con'd)	CHINA (PR) CENTRAL PEOPLES BS Beijing	15kW:DS-1

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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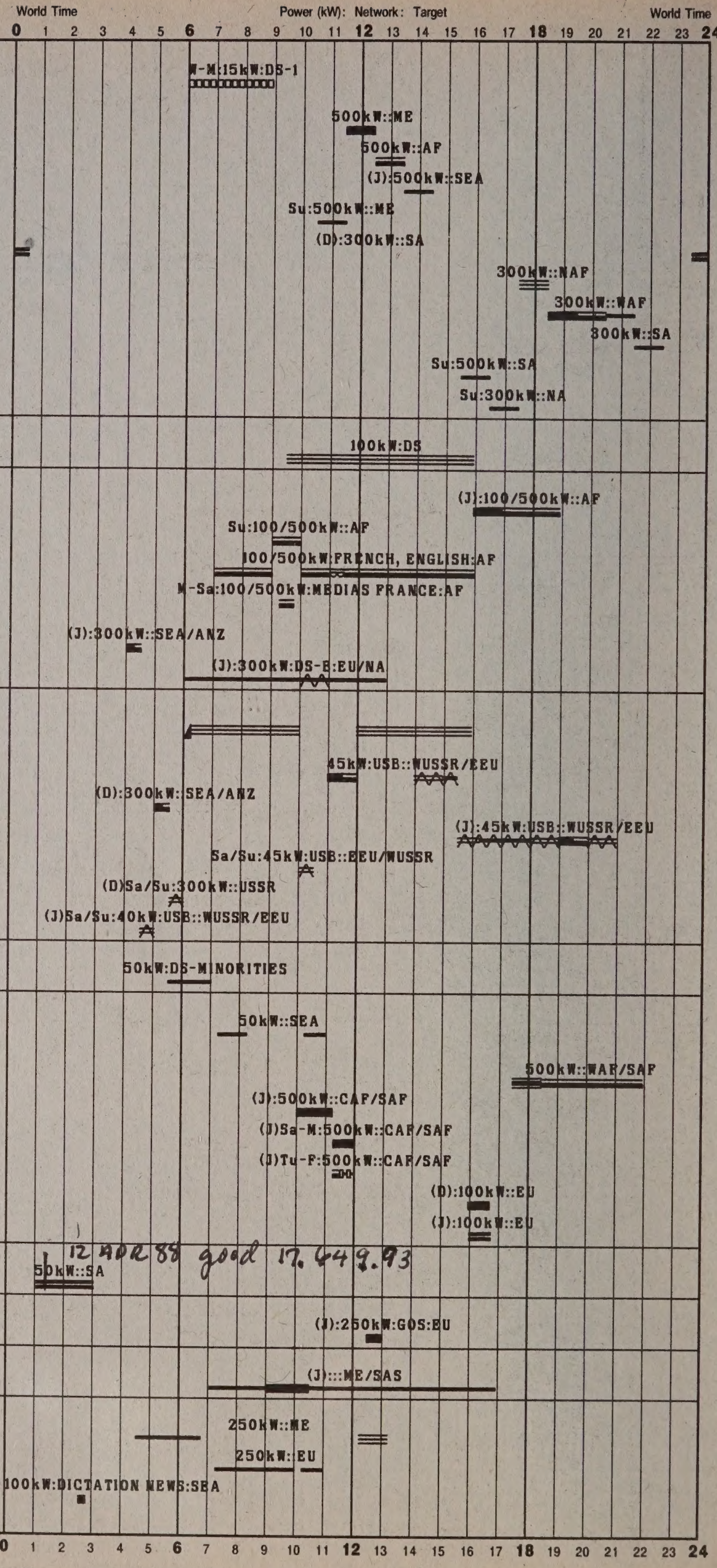
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▭ MULTILINGUAL ═ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17605 (con'd)	CHINA (PR) CENTRAL PEOPLES BS Beijing	W-M:15kW:DS-1
	HOLLAND RADIO NEDERLAND Flevoland	500kW::ME 500kW::AF (J):500kW::SEA Su:500kW::ME (D):300kW::SA
	RADIO NEDERLAND Via Neth Antilles	300kW::NAF 300kW::WAF 300kW::SA Su:500kW::SA Su:300kW::NA
17610	TUNISIA RTV TUNISIENNE Sfax	100kW:DS
17620	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(J):100/500kW::AF Su:100/500kW::AF 100/500kW:FRENCH, ENGLISH:AF M-Sa:100/500kW:MEDIAS FRANCE:AF
	ISRAEL KOL ISRAEL Tel Aviv	(J):300kW::SEA/ANZ
	RASHUTH HASHIDUR Tel Aviv	(J):300kW:DS-B:EU/NA
17630	IRAQ RADIO BAGHDAD	
	ISRAEL KOL ISRAEL Tel Aviv	45kW:USB::WUSSR/EEU (D):300kW::SEA/ANZ (J):45kW:USB::WUSSR/EEU Sa/Su:45kW:USB::EEU/WUSSR (D)Sa/Su:300kW::USSR (J)Sa/Su:40kW:USB::WUSSR/EEU
17635	CHINA (PR) CENTRAL PEOPLES BS Kunming	50kW:DS-MINORITIES
17640	PAKISTAN RADIO PAKISTAN Karachi	50kW::SEA
	USA VOICE OF AMERICA Greenville, NC	500kW::WAF/SAF
	WCSN Olamon, Maine	(J):500kW::CAF/SAF (J)Sa-M:500kW::CAF/SAF (J)Tu-F:500kW::CAF/SAF
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::EU (J):100kW::EU
17650	CHINA (PR) RADIO BEIJING Kunming	50kW::SA 12 APR 88 good 17.649.93
17653v	BANGLADESH RADIO BANGLADESH Dhaka	(J):250kW:GOS:EU
17655	AFGHANISTAN RADIO AFGHANISTAN Via USSR	(J):::ME/SAS
17660v (con'd)	PAKISTAN RADIO PAKISTAN Islamabad	250kW::ME 250kW::EU 100kW:DICTATION NEWS:SEA

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ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	World Time 0–24 — Power (kW): Network: Target
17660v (con'd)	PAKISTAN RADIO PAKISTAN Islamabad	250kW:DICTATION NEWS:EU 250kW:ENGLISH, ETC:EU
	RADIO PAKISTAN Karachi	50kW::ME 50kW:DICTATION NEWS:ME
17665	USSR RADIO MOSCOW/RP&P	EAF/SAF WS
17669	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-GENERAL
17675	BELGIUM RT BELGE FRANCAISE Wavre	Alt 17680kHz:250kW:DS/ES:AF (J):250kW:DS/ES:AF Alt 17680kHz:Su:250kW:DS/ES:AF
	EGYPT RADIO CAIRO Kafr Silim-Abis	250kW::SAS/SEA
	USSR RADIO MOSCOW/RP&P	12 APR 88 weak (J)::WS:ANZ (J)::SAS
17680	BELGIUM RT BELGE FRANCAISE Wavre	Alternative Frequency to 17675kHz
	CHINA (PR) RADIO BEIJING Beijing	500kW::ENA/CA/SA
	RADIO BEIJING Kunming	120kW::SEA
	CLANDESTINE (ASIA) 'VO DEM KAMPUCHEA' Kunming, China (PR)	120kW:PRO-KHMER ROUGE:SEA
	USSR RADIO MOSCOW/RP&P Dushanbé	500kW::ME/NAF/WAF 500kW:WS:ME/NAF/WAF
17685 0050 slavic	ISRAEL KOL ISRAEL Tel Aviv	20kW::WUSSR/EEU (J):20kW::WUSSR/EEU Sa/Su:20kW::WUSSR/EEU
17690	EGYPT RADIO CAIRO Kafr Silim-Abis	250kW::SAS
	USSR RADIO MOSCOW/RP&P	SAS
17695	UNITED KINGDOM BBC Daventry	250/300kW::WUSSR
17700	CHINA (PR) CENTRAL PEOPLES BS Beijing	50kW:DS-2 Th/Sa-Tu:50kW:DS-2
	TURKEY TURKISH RTV CORP Ankara	Alternative Frequency to 17760kHz
	USSR RADIO MOSCOW/RP&P	EAF WS
17705	CUBA RADIO HABANA Via USSR	(J):500kW::WAF/NAF
	CZECHOSLOVAKIA RADIO PRAGUE Pieštány-Velké K'y	Alternative Frequency to 17730kHz
	GERMANY (DR) RADIO BERLIN INTL Nauen	(J):500kW::SAS/SEA (J):100kW::SAS/SEA
(con'd)		

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17705 (con'd)	INDIA ALL INDIA RADIO Delhi	50kW::ANZ 50kW:DS-ENGLISH, ETC
	IRAQ RADIO BAGHDAD Balad-Salah el Deen	(D):500kW
	NEW ZEALAND RADIO NEW ZEALAND Wellington	(D):7.5kW::PAC (D)Sa:7.5kW::PAC (D)Sa/Su:7.5kW::PAC (D)M-F:7.5kW:ENGLISH, ETC:PAC
	SOUTH AFRICA RADIO RSA Meyerton	(J):500kW::AF/EU
	UNITED KINGDOM BBC Various Locations	250/500kW:WORLD SERVICE:WAF
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::AF (D):250kW::AF (D)M-F:250kW::AF
17710	HUNGARY RADIO BUDAPEST	EU M-F:::EU M-Sa:::EU Sa:::EU Sa/Su:::EU Su:::EU Su-F:::EU
	RADIO BUDAPEST Jászberény	250kW::SEA/ANZ M-F:250kW::SEA/ANZ
	ISRAEL KOL ISRAEL Tel Aviv	300kW::WUSSR/EEU (J):300kW::WUSSR/EEU (J)Sa/Su:300kW::WUSSR/EEU
	UNITED KINGDOM BBC Via Singapore	250kW:WORLD SERVICE, ETC:EAS
	USA VOICE OF AMERICA Greenville, NC	(D)M-F:250kW::CA/SA
	USSR RADIO MOSCOW Moscow	240kW::EU/ATL 240kW:MARINERS:SAS
	RADIO MOSCOW/RP&P Novosibirsk	100kW::EAS
17714v	COLOMBIA RADIO NACIONAL Bogotá	Alt 17869vkHz:Irr::25kW:DS
17715	AUSTRALIA RADIO AUSTRALIA Carnarvon	300kW::SAS/SEA
	RADIO AUSTRALIA Darwin	250kW::EAS (J):250kW::EAS/SEA Sa:250kW::EAS
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::ME
	DEUTSCHE WELLE Via Antigua	250kW::SA
	ITALY RTV ITALIANA Rome	Alt 21560kHz:100kW::ENA
(con'd)	UNITED KINGDOM BBC Various Locations	250kW::NAF

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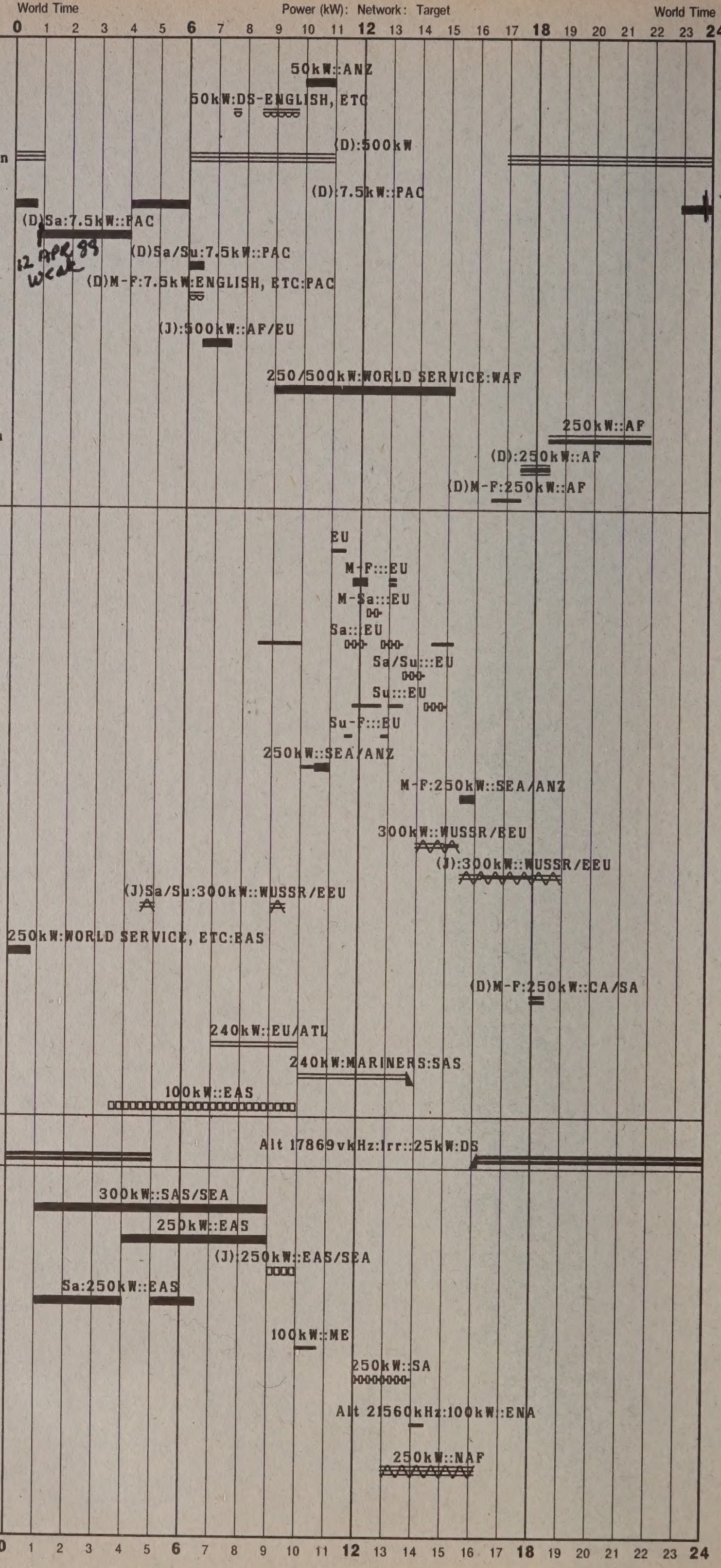

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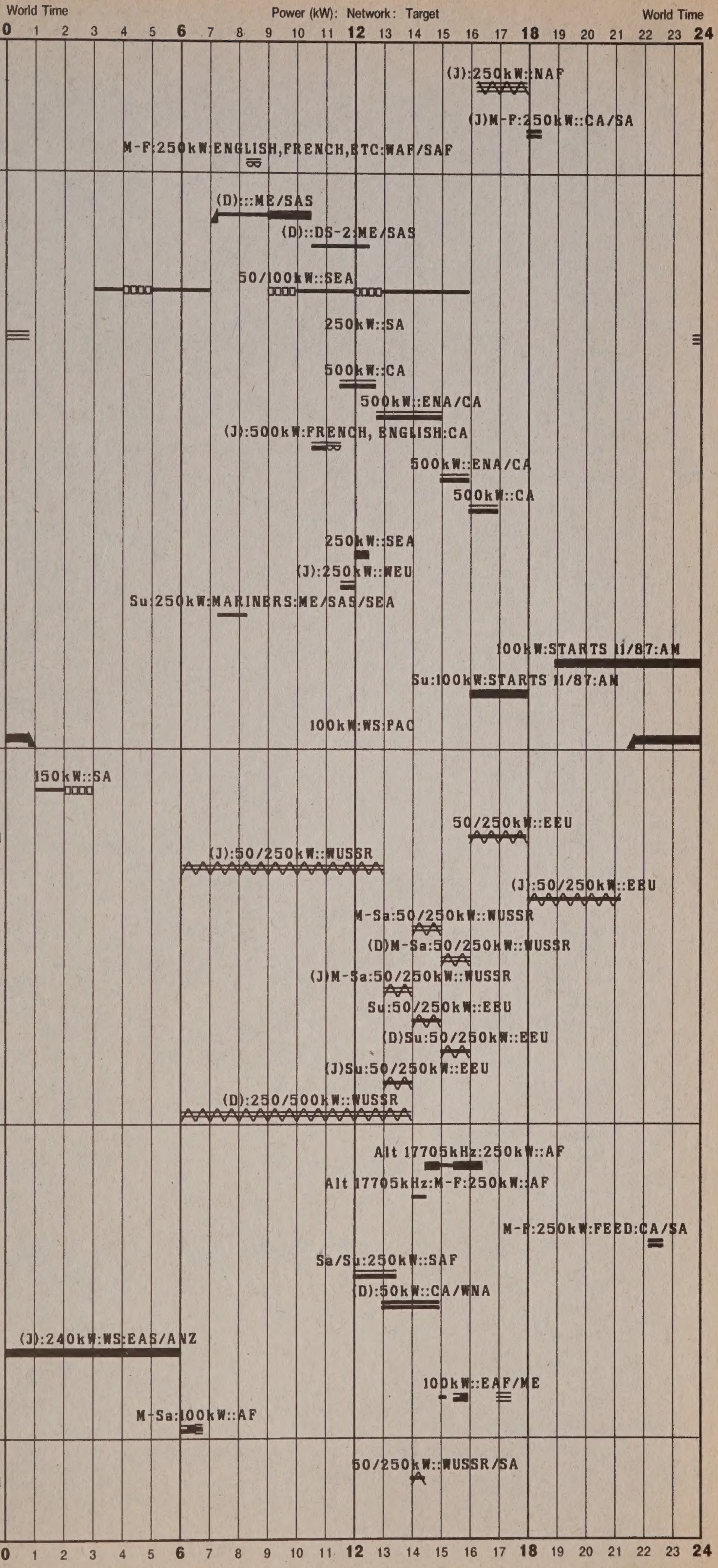

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17715 (con'd)	UNITED KINGDOM BBC Various Locations	(J):250kW::NAF
	USA VOICE OF AMERICA Greenville, NC	(J)M-F:250kW::CA/SA
	VOICE OF AMERICA Via M'rovia, Liberia	M-F:250kW:ENGLISH,FRENCH,ETC:WAF/SAF
17720	AFGHANISTAN RADIO AFGHANISTAN Via USSR	(D):::ME/SAS (D)::DS-2:ME/SAS
	CHINA (TAIWAN) VOICE FREE CHINA T'ai-pei	50/100kW::SEA
	EGYPT RADIO CAIRO Kafr Silîm-Abis	250kW::SA
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	500kW::CA 500kW::ENA/CA (J):500kW:FRENCH, ENGLISH:CA
	RADIO FRANCE INTL Multiple Locations	500kW::ENA/CA
	RADIO FRANCE INTL Via French Guiana	500kW::CA
	ROMANIA RADIO BUCHAREST Bucharest	250kW::SEA (J):250kW::WEU Su:250kW:MARINERS:ME/SAS/SEA
	USA KUSW Salt Lake City,Utah	100kW:STARTS 11/87:AM Su:100kW:STARTS 11/87:AM
	USSR RADIO MOSCOW/RP&P Khabarovsk	100kW:WS:PAC
17725	CHINA (PR) RADIO BEIJING Xi'an	150kW::SA
	USA RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::WUSSR (J):50/250kW::EEU M-Sa:50/250kW::WUSSR (D)M-Sa:50/250kW::WUSSR (J)M-Sa:50/250kW::WUSSR Su:50/250kW::EEU (D)Su:50/250kW::EEU (J)Su:50/250kW::EEU
	RFE-RL Via Pals, Spain	(D):250/500kW::WUSSR
17730	CZECHOSLOVAKIA RADIO PRAGUE Pieštány-Velké K'y	Alt 17705kHz:250kW::AF Alt 17705kHz:M-F:250kW::AF
	USA VOICE OF AMERICA Greenville, NC	M-F:250kW:FEED:CA/SA
	VOICE OF AMERICA Via M'rovia, Liberia	Sa/Su:250kW::SAF
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):50kW::CA/WNA
	USSR RADIO MOSCOW/RP&P Irkutsk	(J):240kW:WS:EAS/ANZ
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EAF/ME M-Sa:100kW::AF
17735 (con'd)	USA R FREE AFGHANISTAN Via Lisbon, Portugal	50/250kW::WUSSR/SA

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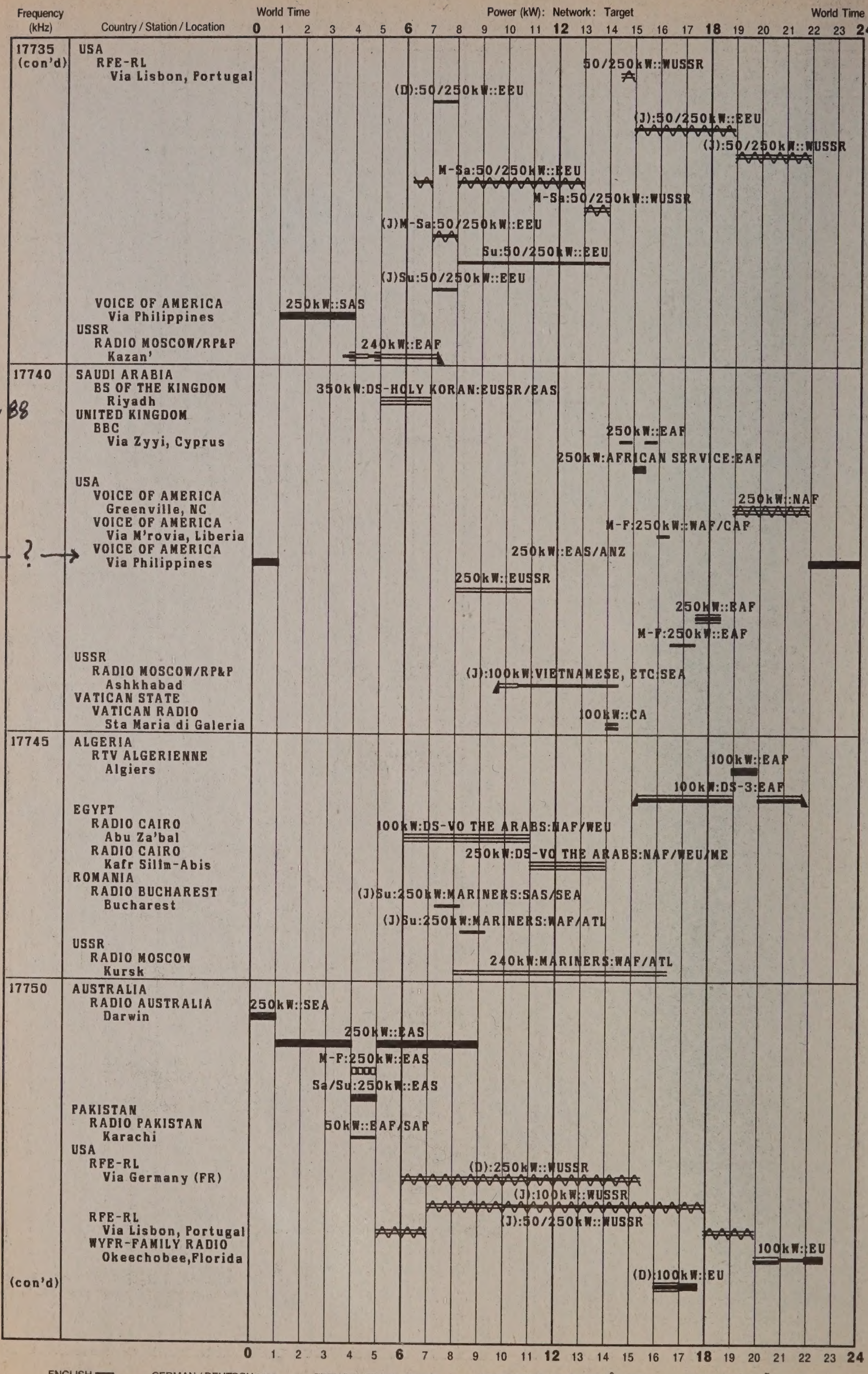

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17735 (con'd)	USA RFE-RL Via Lisbon, Portugal	50/250kW::WUSSR (D):50/250kW::EEU (J):50/250kW::EEU (J):50/250kW::WUSSR M-Sa:50/250kW::EEU M-Sa:50/250kW::WUSSR (J)M-Sa:50/250kW::EEU Su:50/250kW::EEU (J)Su:50/250kW::EEU
	VOICE OF AMERICA Via Philippines	250kW::SAS
	USSR RADIO MOSCOW/RP&P Kazan'	240kW::EAF
17740	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:DS-HOLY KORAN:EUSSR/EAS
	UNITED KINGDOM BBC Via Zyyi, Cyprus	250kW::EAF 250kW:AFRICAN SERVICE:EAF
	USA VOICE OF AMERICA Greenville, NC	250kW::NAF
	VOICE OF AMERICA Via M'rovia, Liberia	M-F:250kW::WAF/CAF
	VOICE OF AMERICA Via Philippines	250kW::EAS/ANZ 250kW::EUSSR 250kW::EAF M-F:250kW::EAF
	USSR RADIO MOSCOW/RP&P Ashkhabad	(J):100kW:VIETNAMESE, ETC:SEA
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::CA
17745	ALGERIA RTV ALGERIENNE Algiers	100kW::EAF 100kW:DS-3:EAF
	EGYPT RADIO CAIRO Abu Za'bal	100kW:DS-VO THE ARABS:NAF/WEU
	RADIO CAIRO Kafr Silim-Abis	250kW:DS-VO THE ARABS:NAF/WEU/ME
	ROMANIA RADIO BUCHAREST Bucharest	(J)Su:250kW:MARINERS:SAS/SEA (J)Su:250kW:MARINERS:WAF/ATL
	USSR RADIO MOSCOW Kursk	240kW:MARINERS:WAF/ATL
17750	AUSTRALIA RADIO AUSTRALIA Darwin	250kW::SEA 250kW::EAS M-F:250kW::EAS Sa/Su:250kW::EAS
	PAKISTAN RADIO PAKISTAN Karachi	50kW::EAF/SAF
	USA RFE-RL Via Germany (FR)	(D):250kW::WUSSR (J):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee, Florida	100kW::EU (D):100kW::EU
(con'd)		

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ARABIC / عربي ☰ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▩ MULTILINGUAL ▤ OTHER —
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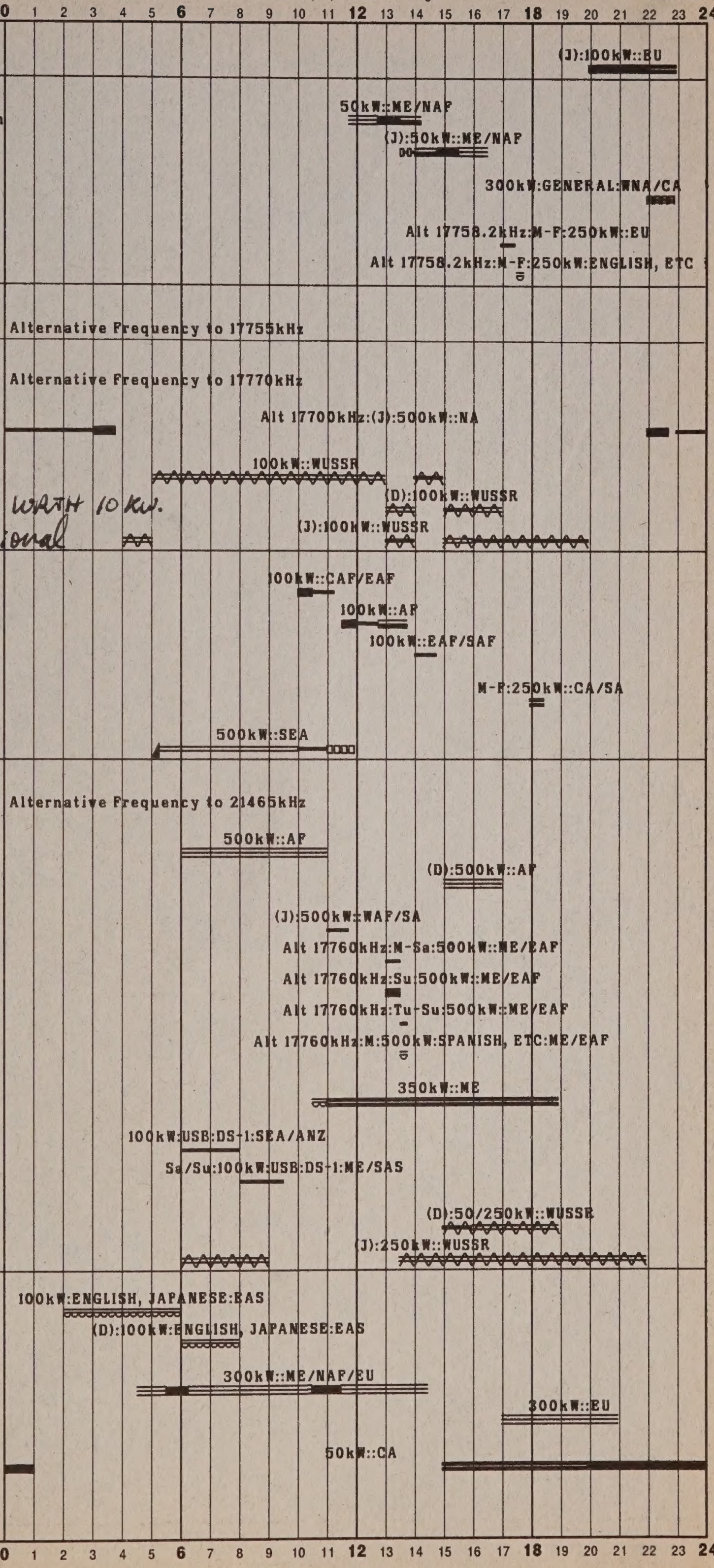

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17750 (con'd)	USA WYFR-FAMILY RADIO Okeechobee,Florida	(J):100kW::EU
17755	GERMANY (DR) RADIO BERLIN INTL Königswusterhausen	50kW::ME/NAF (J):50kW::ME/NAF
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	300kW:GENERAL:WNA/CA
	SURINAME R SURINAME INTL Via Brasília, Brazil	Alt 17758.2kHz:M-F:250kW::EU Alt 17758.2kHz:M-F:250kW:ENGLISH, ETC
17758.2	SURINAME R SURINAME INTL Via Brasília, Brazil	Alternative Frequency to 17755kHz
17760	NORWAY RADIO NORWAY INTL Kvitsøy	Alternative Frequency to 17770kHz
	TURKEY TURKISH RTV CORP Ankara	Alt 17700kHz:(J):500kW::NA
	USA RFE-RL Via Germany (FR)	100kW::WUSSR (D):100kW::WUSSR (J):100kW::WUSSR
0100 12 APR 88 17.764.8	Radio Mexico International	WRTH 10 kW.
17765	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::CAF/EAF 100kW::AF 100kW::EAF/SAF
	USA VOICE OF AMERICA Dixon, California	M-F:250kW::CA/SA
	USSR RADIO MOSCOW/RP&P Tula	500kW::SEA
17770	EGYPT RADIO CAIRO Kafr Silîm-Abis	Alternative Frequency to 21465kHz
	IRAQ RADIO BAGHDAD Balad-Salah el Deen	500kW::AF (D):500kW::AF
	NORWAY RADIO NORWAY INTL Kvitsøy	(J):500kW::WAF/SA Alt 17760kHz:M-Sa:500kW::ME/EAF Alt 17760kHz:Su:500kW::ME/EAF Alt 17760kHz:Tu-Su:500kW::ME/EAF Alt 17760kHz:M:500kW:SPANISH, ETC:ME/EAF
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::ME
	SWEDEN SVERIGES RIKSRADIO Varberg	100kW:USB:DS-1:SEA/ANZ Sa/Su:100kW:USB:DS-1:ME/SAS
	USA RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(J):250kW::WUSSR
17775	NORTHERN MARIANA IS KYOI Saipan Island	100kW:ENGLISH, JAPANESE:EAS (D):100kW:ENGLISH, JAPANESE:EAS
	UNITED ARAB EMIRATES UAE RADIO Dubai	300kW::ME/NAF/EU 300kW::EU
(con'd)	USA KVOH-VOICE OF HOPE Rancho Simi, Ca	50kW::CA

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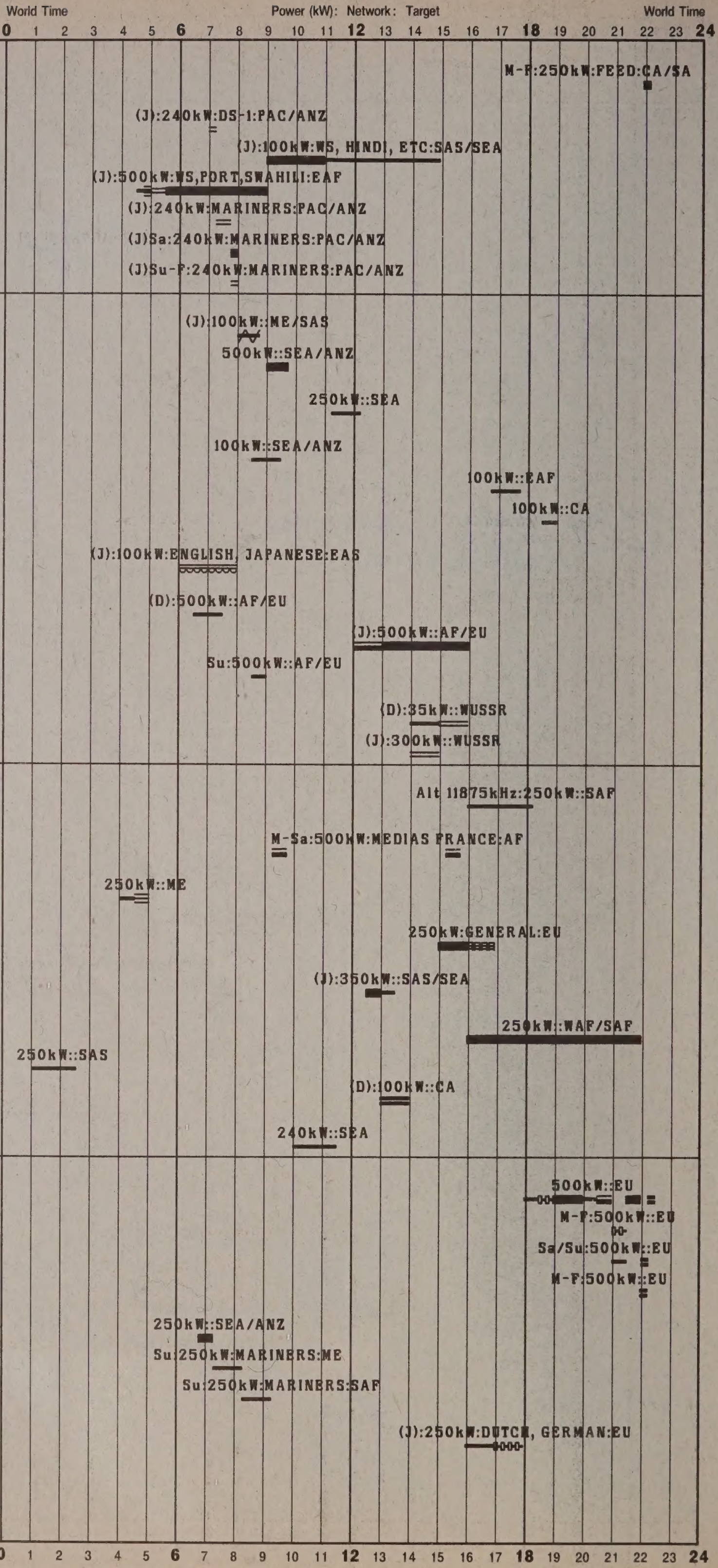
Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17775 (con'd)	USA VOICE OF AMERICA Greenville, NC	M-F:250kW:FEED:CA/SA
	USSR RADIO MOSCOW Khabarovsk	(J):240kW:DS-1:PAC/ANZ
	RADIO MOSCOW/RP&P Frunze, Kirgiziya	(J):100kW:WS, HINDI, ETC:SAS/SEA (J):500kW:WS,PORT,SWAHILI:EAF
	RADIO TIKHIY OKEAN Khabarovsk	(J):240kW:MARINERS:PAC/ANZ (J)Sa:240kW:MARINERS:PAC/ANZ (J)Su-F:240kW:MARINERS:PAC/ANZ
17780	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::ME/SAS
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::SEA/ANZ
	INDIA ALL INDIA RADIO Aligarh	250kW::SEA
	ITALY RTV ITALIANA Rome	100kW::SEA/ANZ 100kW::EAF 100kW::CA
	NORTHERN MARIANA IS KYOI Saipan Island	(J):100kW:ENGLISH, JAPANESE:EAS
	SOUTH AFRICA RADIO RSA Meyerton	(D):500kW::AF/EU (J):500kW::AF/EU Su:500kW::AF/EU
	USA VOICE OF AMERICA Via Tangier,Morocco	(D):35kW::WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR
17785	EGYPT RADIO CAIRO Kafr Silim-Abis	Alt 11875kHz:250kW::SAF
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	M-Sa:500kW:MEDIAS FRANCE:AF
	INDIA ALL INDIA RADIO Aligarh	250kW::ME
	JAPAN RADIO JAPAN/NHK Via Moyabi, Gabon	250kW:GENERAL:EU
	SWEDEN RADIO SWEDEN INTL Hörby	(J):350kW::SAS/SEA
	USA VOICE OF AMERICA Greenville, NC	250kW::WAF/SAF
	VOICE OF AMERICA Via Philippines	250kW::SAS
	WYFR-FAMILY RADIO Okeechobee,Florida	(D):100kW::CA
	USSR RADIO MOSCOW/RP&P Ivano-Frankovsk	240kW::SEA
17790	ECUADOR HCJB-VO THE ANDES Quito	500kW::EU M-F:500kW::EU Sa/Su:500kW::EU
	RADIO NACIONAL Quito	M-F:500kW::EU
	ROMANIA RADIO BUCHAREST Bucharest	250kW::SEA/ANZ Su:250kW:MARINERS:ME Su:250kW:MARINERS:SAF
(con'd)	SOUTH AFRICA RADIO RSA Meyerton	(J):250kW:DUTCH, GERMAN:EU



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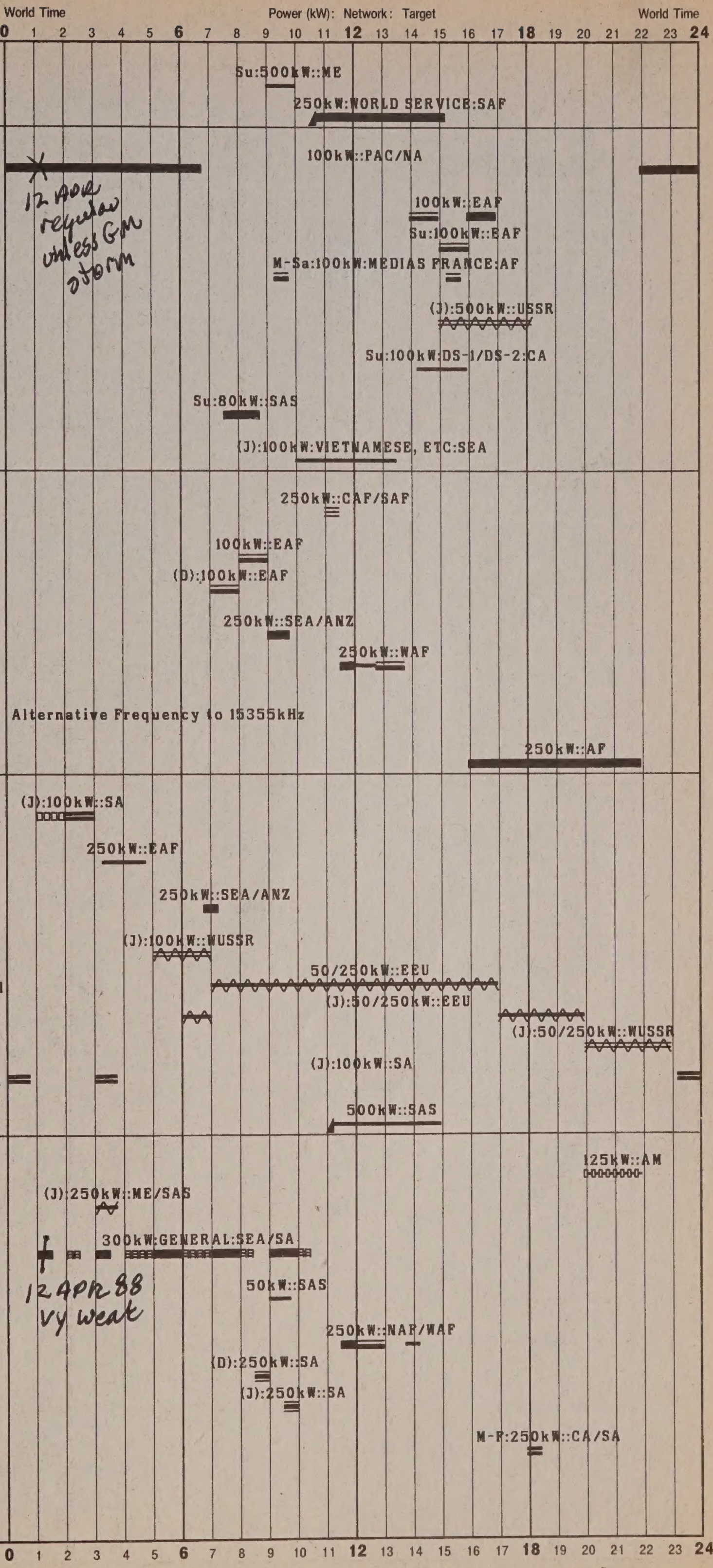
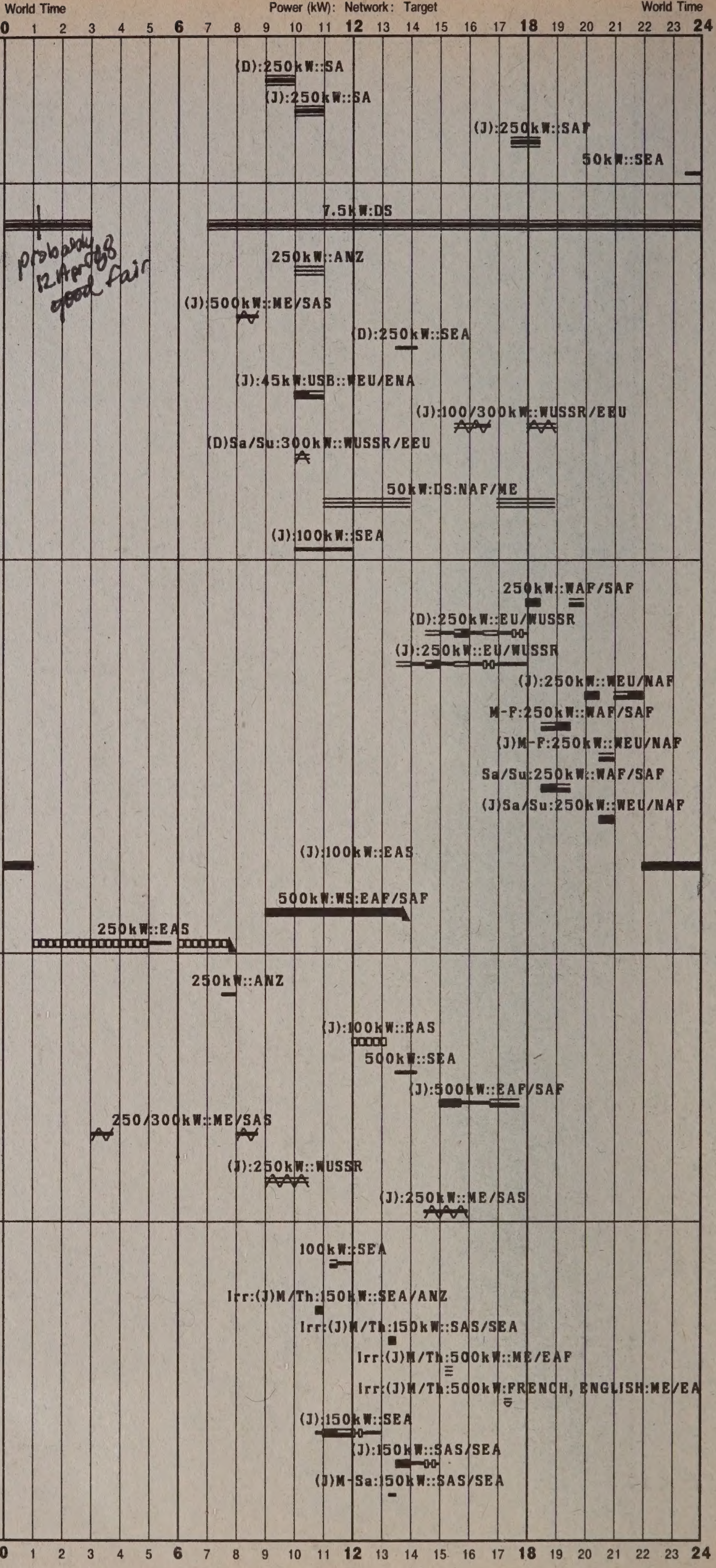


Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17790 (con'd)	UNITED KINGDOM BBC Holywell-Rampisham	Su:500kW::ME
	BBC Via Ascension	250kW:WORLD SERVICE:SAF
17795	AUSTRALIA RADIO AUSTRALIA Shepparton	100kW::PAC/NA 12 Apr regular unless GM storm
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EAF Su:100kW::EAF M-Sa:100kW:MEDIAS FRANCE:AF
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::USSR
	ITALY RTV ITALIANA Rome	Su:100kW:DS-1/DS-2:CA
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	Su:80kW::SAS
	USSR RADIO MOSCOW/RP&P Serpukhov	(J):100kW:VIETNAMESE, ETC:SEA
17800	EGYPT RADIO CAIRO Kafr Silim-Abis	250kW::CAF/SAF
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	100kW::EAF (D):100kW::EAF
	GERMANY (FR) DEUTSCHE WELLE Via Kigali, Rwanda	250kW::SEA/ANZ 250kW::WAF
	ITALY RTV ITALIANA Rome	Alternative Frequency to 15355kHz
	USA VOICE OF AMERICA Cincinnati, Ohio	250kW::AF
17805 0100 weak carrier	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(J):100kW::SA
	INDIA ALL INDIA RADIO Aligarh	250kW::EAF
	ROMANIA RADIO BUCHAREST Bucharest	250kW::SEA/ANZ
	USA RFE-RL Via Germany (FR)	(J):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::EEU (J):50/250kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	(J):100kW::SA
	USSR RADIO MOSCOW/RP&P Tbilisi	500kW::SAS
17810	GERMANY (FR) DEUTSCHE WELLE Via Antigua	125kW::AM
	DEUTSCHE WELLE Via Cyclops, Malta	(J):250kW::ME/SAS
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	300kW:GENERAL:SEA/SA 12 APR 88 Vy weak
	PAKISTAN RADIO PAKISTAN Karachi	50kW::SAS
	UNITED KINGDOM BBC Skelton, Cumbria	250kW::NAF/WAF
	BBC Via Ascension	(D):250kW::SA (J):250kW::SA
(con'd)	USA VOICE OF AMERICA Cincinnati, Ohio	M-F:250kW::CA/SA

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ≡ SPANISH / ESPAÑOL ≡
ARABIC / عرب ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▭ MULTILINGUAL ≡ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17810 (con'd)	**USA** VOICE OF AMERICA Via Ascension	(D):250kW::SA (J):250kW::SA
	VOICE OF AMERICA Via M'rovia, Liberia	(J):250kW::SAF
	VOICE OF AMERICA Via Philippines	50kW::SEA
17815	**BRAZIL** RADIO CULTURA São Paulo	7.5kW:DS
	EGYPT RADIO CAIRO Kafr Silim-Abis	250kW::ANZ
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	(J):500kW::ME/SAS
	DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::SEA
	ISRAEL KOL ISRAEL Tel Aviv	(J):45kW:USB::WEU/ENA (J):100/300kW::WUSSR/EEU (D)Sa/Su:300kW::WUSSR/EEU
	MOROCCO RTV MAROCAINE Tangier	50kW:DS:NAF/ME
	USSR RADIO MOSCOW/RP&P Frunze, Kirgiziya	(J):100kW::SEA
17820	**CANADA** RADIO CANADA INTL Sackville, NB	250kW::WAF/SAF (D):250kW::EU/WUSSR (J):250kW::EU/WUSSR (J):250kW::WEU/NAF M-F:250kW::WAF/SAF (J)M-F:250kW::WEU/NAF Sa/Su:250kW::WAF/SAF (J)Sa/Su:250kW::WEU/NAF
	USA VOICE OF AMERICA Via Philippines	(J):100kW::EAS
	USSR RADIO MOSCOW/RP&P Kiev	500kW:WS:EAF/SAF
	RADIO MOSCOW/RP&P Novosibirsk	250kW::EAS
17825	**BULGARIA** RADIO SOFIA Rebrovo-Sofia	250kW::ANZ
	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::EAS
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::SEA (J):500kW::EAF/SAF
	DEUTSCHE WELLE Via Sri Lanka	250/300kW::ME/SAS
	USA RFE-RL Via Pals, Spain	(J):250kW::WUSSR
	VOICE OF AMERICA Via Kavála, Greece	(J):250kW::ME/SAS
17830	**INDIA** ALL INDIA RADIO Delhi	100kW::SEA
	SWITZERLAND RED CROSS BC SVC Schwarzenburg	Irr:(J)M/Th:150kW::SEA/ANZ Irr:(J)M/Th:150kW::SAS/SEA
	RED CROSS BC SVC Sottens	Irr:(J)M/Th:500kW::ME/EAF Irr:(J)M/Th:500kW:FRENCH, ENGLISH:ME/EA
	SWISS RADIO INTL Schwarzenburg	(J):150kW::SEA (J):150kW::SAS/SEA (J)M-Sa:150kW::SAS/SEA
(con'd)		

probably 12 Apr 88 good fair

Moscow o hear at 0050 in E to ? Africa

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ═
ARABIC / عربي ≡ RUSSIAN / PYCCKИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
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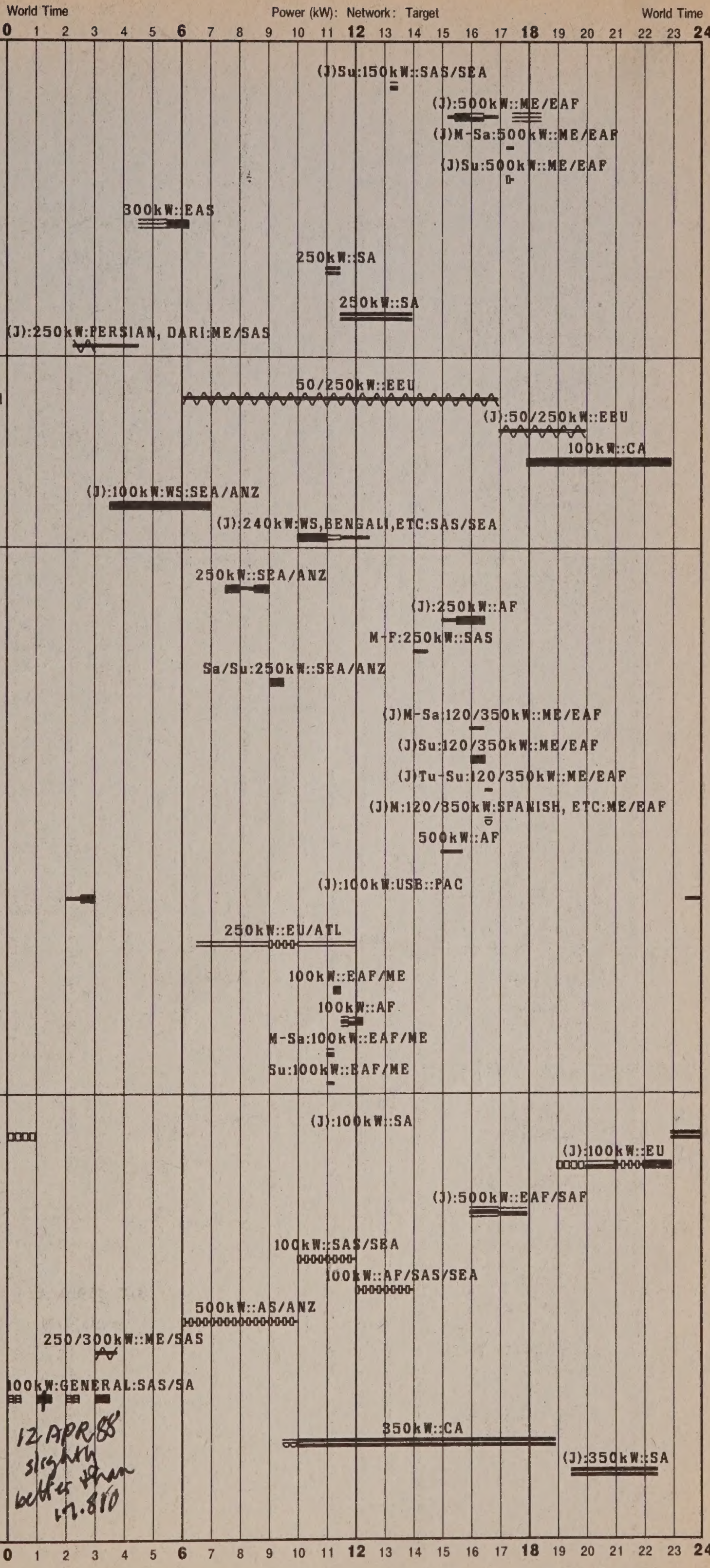

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17830 (con'd)	SWITZERLAND SWISS RADIO INTL Schwarzenburg	(J)Su:150kW::SAS/SEA
	SWISS RADIO INTL Sottens	(J):500kW::ME/EAF
		(J)M-Sa:500kW::ME/EAF
		(J)Su:500kW::ME/EAF
	UNITED ARAB EMIRATES UAE RADIO Dubai	300kW::EAS
	UNITED KINGDOM BBC Via Ascension	250kW::SA
	USA VOICE OF AMERICA Via Ascension	250kW::SA
	VOICE OF AMERICA Via Kaválla, Greece	(J):250kW:PERSIAN, DARI:ME/SAS
17835	USA RFE-RL Via Lisbon, Portugal	50/250kW::EEU
		(J):50/250kW::EEU
	+WORLD HARVEST R Noblesville,Indiana	100kW::CA
	USSR RADIO MOSCOW/RP&P Khabarovsk	(J):100kW:WS:SEA/ANZ
	RADIO MOSCOW/RP&P Vinnitsa	(J):240kW:WS,BENGALI,ETC:SAS/SEA
17840	CZECHOSLOVAKIA RADIO PRAGUE Pieštány-Velké K'y	250kW::SEA/ANZ
		(J):250kW::AF
		M-F:250kW::SAS
		Sa/Su:250kW::SEA/ANZ
	NORWAY RADIO NORWAY INTL Fredrikstad	(J)M-Sa:120/350kW::ME/EAF
		(J)Su:120/350kW::ME/EAF
		(J)Tu-Su:120/350kW::ME/EAF
		(J)M:120/350kW:SPANISH, ETC:ME/EAF
	RADIO NORWAY INTL Kvitsøy	500kW::AF
	SWEDEN RADIO SWEDEN INTL Varberg	(J):100kW:USB::PAC
	USSR RADIO MOSCOW/RP&P Zhigulevsk	250kW::EU/ATL
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EAF/ME
		100kW::AF
		M-Sa:100kW::EAF/ME
		Su:100kW::EAF/ME
17845	CHINA (TAIWAN) VOICE FREE CHINA Via Okeechobee,USA	(J):100kW::SA
		(J):100kW::EU
	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(J):500kW::EAF/SAF
	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::SAS/SEA
		100kW::AF/SAS/SEA
	DEUTSCHE WELLE Türkheim-Wertach'l	500kW::AS/ANZ
	DEUTSCHE WELLE Via Sri Lanka	250/300kW::ME/SAS
	JAPAN RADIO JAPAN/NHK Tōkyō-Yamata	100kW:GENERAL:SAS/SA
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::CA
		(J):350kW::SA
(con'd)		

12 APR 88
slightly
better than
17.810

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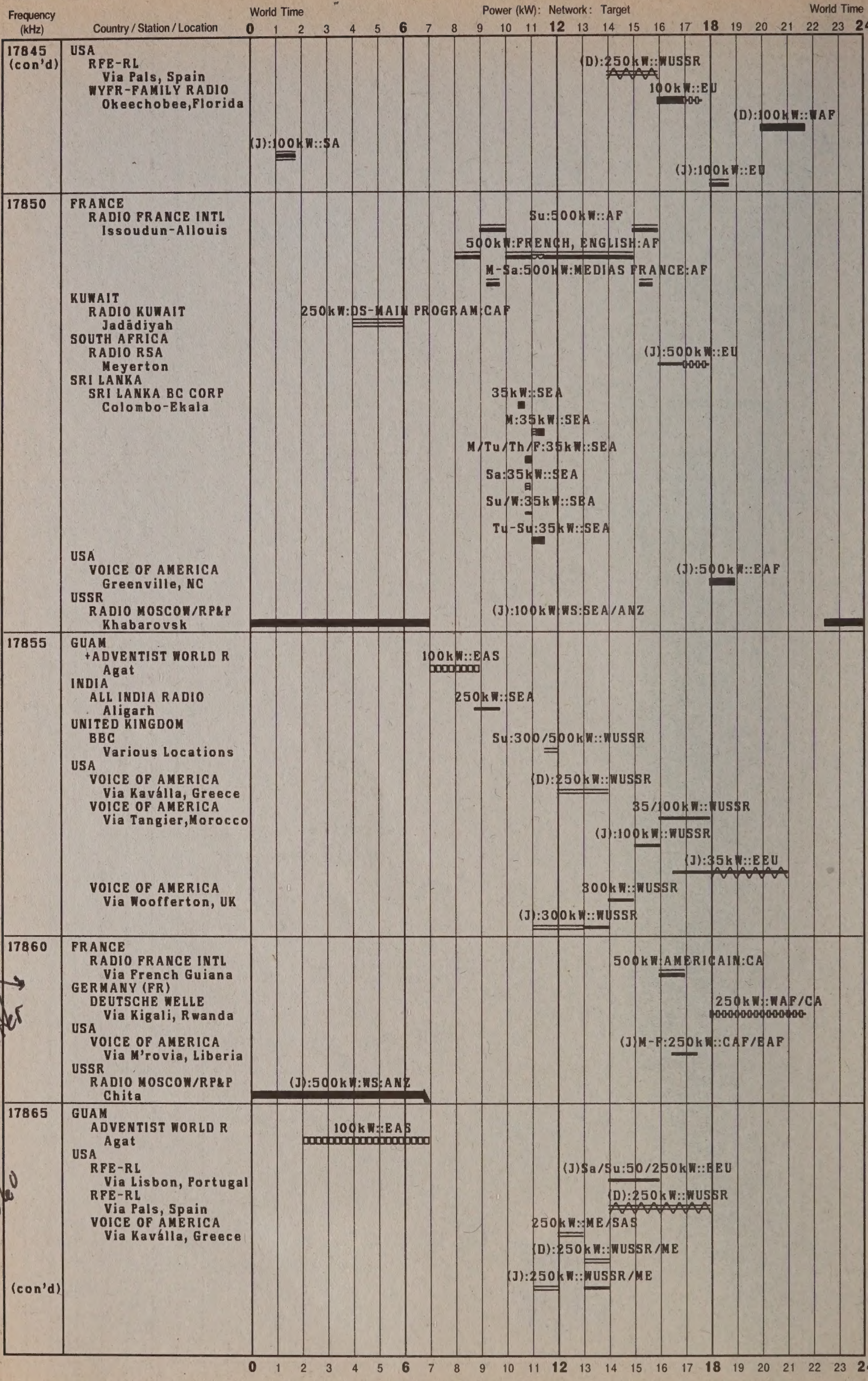
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17845 (con'd)	USA RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	WYFR-FAMILY RADIO Okeechobee,Florida	100kW::EU
		(D):100kW::WAF
		(J):100kW::SA
		(J):100kW::EU
17850	FRANCE RADIO FRANCE INTL Issoudun-Allouis	Su:500kW::AF
		500kW:FRENCH, ENGLISH:AF
		M-Sa:500kW:MEDIAS FRANCE:AF
	KUWAIT RADIO KUWAIT Jadādiyah	250kW:DS-MAIN PROGRAM:CAF
	SOUTH AFRICA RADIO RSA Meyerton	(J):500kW::EU
	SRI LANKA SRI LANKA BC CORP Colombo-Ekala	35kW::SEA
		M:35kW::SEA
		M/Tu/Th/F:35kW::SEA
		Sa:35kW::SEA
		Su/W:35kW::SEA
		Tu-Su:35kW::SEA
	USA VOICE OF AMERICA Greenville, NC	(J):500kW::EAF
	USSR RADIO MOSCOW/RP&P Khabarovsk	(J):100kW:WS:SEA/ANZ
17855	GUAM +ADVENTIST WORLD R Agat	100kW::EAS
	INDIA ALL INDIA RADIO Aligarh	250kW::SEA
	UNITED KINGDOM BBC Various Locations	Su:300/500kW::WUSSR
	USA VOICE OF AMERICA Via Kaválla, Greece	(D):250kW::WUSSR
	VOICE OF AMERICA Via Tangier,Morocco	35/100kW::WUSSR
		(J):100kW::WUSSR
		(J):35kW::EEU
	VOICE OF AMERICA Via Woofferton, UK	300kW::WUSSR
		(J):300kW::WUSSR
17860	FRANCE RADIO FRANCE INTL Via French Guiana	500kW:AMERICAIN:CA
	GERMANY (FR) DEUTSCHE WELLE Via Kigali, Rwanda	250kW::WAF/CA
	USA VOICE OF AMERICA Via M'rovia, Liberia	(J)M-F:250kW::CAF/EAF
	USSR RADIO MOSCOW/RP&P Chita	(J):500kW:WS:ANZ
17865	GUAM ADVENTIST WORLD R Agat	100kW::EAS
	USA RFE-RL Via Lisbon, Portugal	(J)Sa/Su:50/250kW::EEU
	RFE-RL Via Pals, Spain	(D):250kW::WUSSR
	VOICE OF AMERICA Via Kaválla, Greece	250kW::ME/SAS
		(D):250kW::WUSSR/ME
		(J):250kW::WUSSR/ME
(con'd)		

12 APR 88 0110 → strong carrier

ditto 17.860

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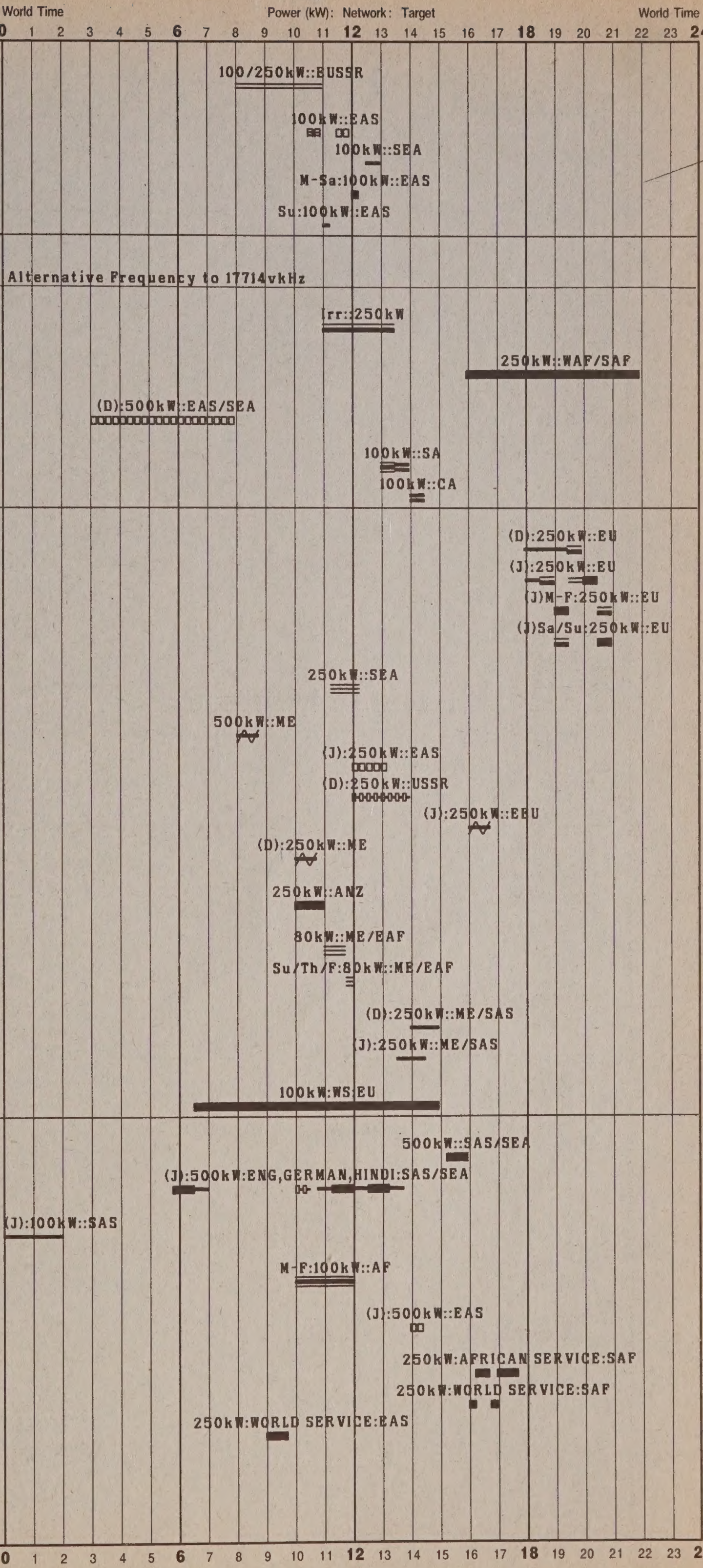
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17865 (con'd)	USA VOICE OF AMERICA Via Philippines	100/250kW::EUSSR
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::EAS 100kW::SEA M-Sa:100kW::EAS Su:100kW::EAS
17869v	COLOMBIA RADIO NACIONAL Bogotá	Alternative Frequency to 17714vkHz
17870	GABON AFRIQUE NUMERO UN Moanda-Moyabe	Irr::250kW
	USA VOICE OF AMERICA Via M'rovia, Liberia	250kW::WAF/SAF
	USSR RADIO MOSCOW/RP&P Chita	(D):500kW::EAS/SEA
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::SA 100kW::CA
17875	CANADA RADIO CANADA INTL Sackville, NB	(D):250kW::EU (J):250kW::EU (J)M-F:250kW::EU (J)Sa/Su:250kW::EU
	EGYPT RADIO CAIRO Kafr Silim-Abis	250kW::SEA
	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	500kW::ME
	DEUTSCHE WELLE Via Cyclops, Malta	(J):250kW::EAS
	DEUTSCHE WELLE Via Sines, Portugal	(D):250kW::USSR (J):250kW::EEU
	DEUTSCHE WELLE Via Sri Lanka	(D):250kW::ME
	INDIA ALL INDIA RADIO Aligarh	250kW::ANZ
	SEYCHELLES FAR EAST BC ASS'N North Pt, Mahé Is	80kW::ME/EAF Su/Th/F:80kW::ME/EAF
	USA VOICE OF AMERICA Via Kavála, Greece	(D):250kW::ME/SAS (J):250kW::ME/SAS
	USSR RADIO MOSCOW/RP&P Vinnitsa	100kW:WS:EU
17880	GERMANY (DR) RADIO BERLIN INTL Nauen	500kW::SAS/SEA (J):500kW:ENG,GERMAN,HINDI:SAS/SEA
	NORTHERN MARIANA IS KFBS-FAR EAST BC Saipan Island	(J):100kW::SAS
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	M-F:100kW::AF
	TURKEY TURKISH RTV CORP Ankara	(J):500kW::EAS
	UNITED KINGDOM BBC Via Ascension	250kW:AFRICAN SERVICE:SAF 250kW:WORLD SERVICE:SAF
(con'd)	BBC Via Singapore	250kW:WORLD SERVICE:EAS



ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ≡ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ≡ RUSSIAN / РУССКИЙ = CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▭ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

12 APR 88
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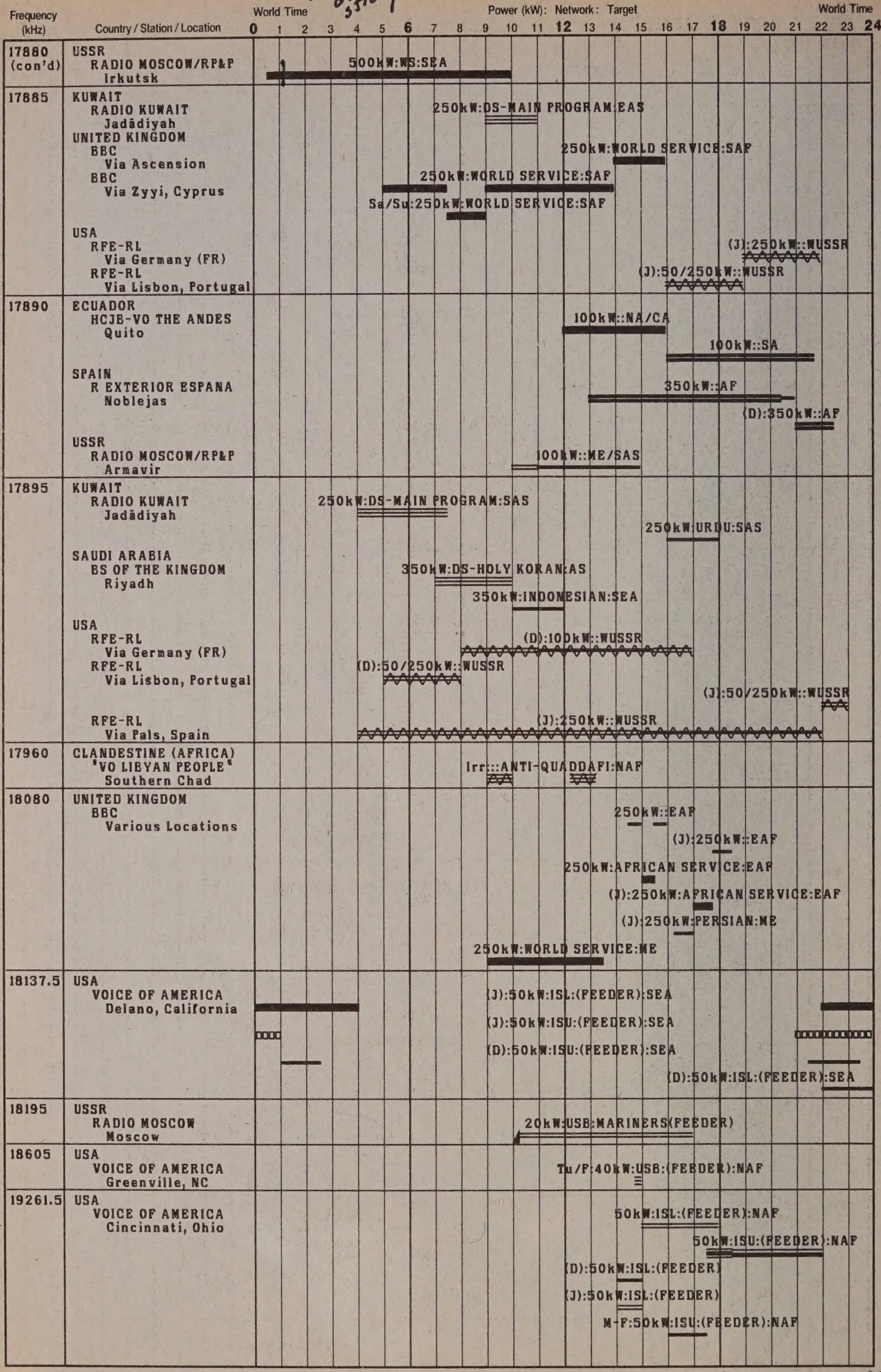

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
17880 (con'd)	**USSR** RADIO MOSCOW/RP&P Irkutsk	500kW:WS:SEA
17885	**KUWAIT** RADIO KUWAIT Jadâdiyah	250kW:DS-MAIN PROGRAM:EAS
	UNITED KINGDOM BBC Via Ascension	250kW:WORLD SERVICE:SAF
	BBC Via Zyyi, Cyprus	250kW:WORLD SERVICE:SAF Sa/Su:250kW:WORLD SERVICE:SAF
	USA RFE-RL Via Germany (FR)	(J):250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR
17890	**ECUADOR** HCJB-VO THE ANDES Quito	100kW::NA/CA 100kW::SA
	SPAIN R EXTERIOR ESPANA Noblejas	350kW::AF (D):350kW::AF
	USSR RADIO MOSCOW/RP&P Armavir	100kW::ME/SAS
17895	**KUWAIT** RADIO KUWAIT Jadâdiyah	250kW:DS-MAIN PROGRAM:SAS 250kW:URDU:SAS
	SAUDI ARABIA BS OF THE KINGDOM Riyadh	350kW:DS-HOLY KORAN:AS 350kW:INDONESIAN:SEA
	USA RFE-RL Via Germany (FR)	(D):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(D):50/250kW::WUSSR (J):50/250kW::WUSSR
	RFE-RL Via Pals, Spain	(J):250kW::WUSSR
17960	**CLANDESTINE (AFRICA)** 'VO LIBYAN PEOPLE' Southern Chad	Irr:::ANTI-QUADDAFI:NAF
18080	**UNITED KINGDOM** BBC Various Locations	250kW::EAF (J):250kW::EAF 250kW:AFRICAN SERVICE:EAF (J):250kW:AFRICAN SERVICE:EAF (J):250kW:PERSIAN:ME 250kW:WORLD SERVICE:ME
18137.5	**USA** VOICE OF AMERICA Delano, California	(J):50kW:ISL:(FEEDER):SEA (J):50kW:ISU:(FEEDER):SEA (D):50kW:ISU:(FEEDER):SEA (D):50kW:ISL:(FEEDER):SEA
18195	**USSR** RADIO MOSCOW Moscow	20kW:USB:MARINERS(FEEDER)
18605	**USA** VOICE OF AMERICA Greenville, NC	Tu/F:40kW:USB:(FEEDER):NAF
19261.5	**USA** VOICE OF AMERICA Cincinnati, Ohio	50kW:ISL:(FEEDER):NAF 50kW:ISU:(FEEDER):NAF (D):50kW:ISL:(FEEDER) (J):50kW:ISL:(FEEDER) M-F:50kW:ISU:(FEEDER):NAF

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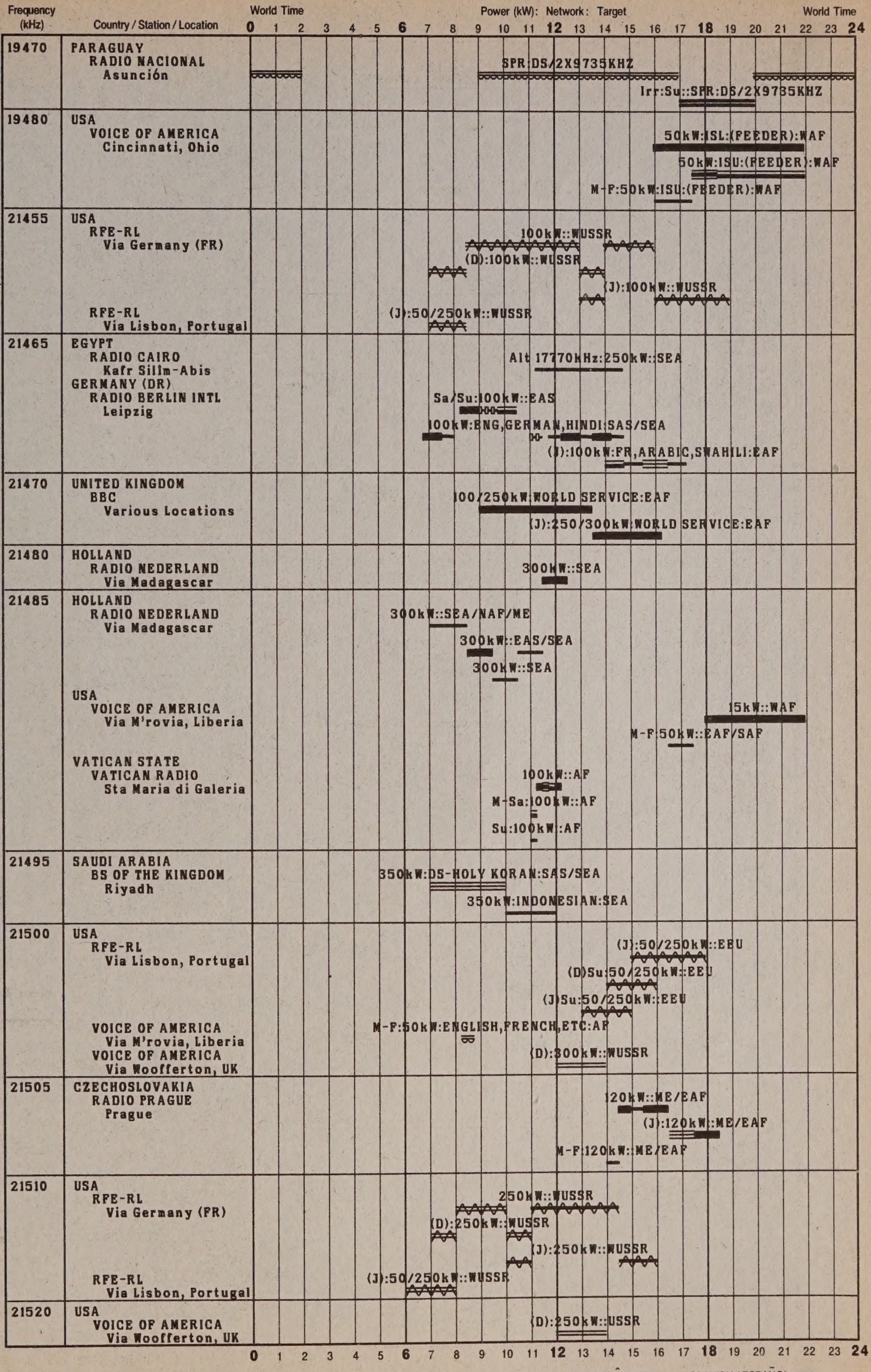

Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
19470	**PARAGUAY** RADIO NACIONAL Asunción	SPR:DS/2X9735KHZ Irr:Su::SPR:DS/2X9735KHZ
19480	**USA** VOICE OF AMERICA Cincinnati, Ohio	50kW:ISL:(FEEDER):WAF 50kW:ISU:(FEEDER):WAF M-F:50kW:ISU:(FEEDER):WAF
21455	**USA** RFE-RL Via Germany (FR)	100kW::WUSSR (D):100kW::WUSSR (J):100kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR
21465	**EGYPT** RADIO CAIRO Kafr Silim-Abis	Alt 17770kHz:250kW::SEA
	GERMANY (DR) RADIO BERLIN INTL Leipzig	Sa/Su:100kW::EAS 100kW:ENG,GERMAN,HINDI:SAS/SEA (J):100kW:FR,ARABIC,SWAHILI:EAF
21470	**UNITED KINGDOM** BBC Various Locations	100/250kW:WORLD SERVICE:EAF (J):250/300kW:WORLD SERVICE:EAF
21480	**HOLLAND** RADIO NEDERLAND Via Madagascar	300kW::SEA
21485	**HOLLAND** RADIO NEDERLAND Via Madagascar	300kW::SEA/NAF/ME 300kW::EAS/SEA 300kW::SEA
	USA VOICE OF AMERICA Via M'rovia, Liberia	15kW::WAF M-F:50kW::EAF/SAF
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::AF M-Sa:100kW::AF Su:100kW::AF
21495	**SAUDI ARABIA** BS OF THE KINGDOM Riyadh	350kW:DS-HOLY KORAN:SAS/SEA 350kW:INDONESIAN:SEA
21500	**USA** RFE-RL Via Lisbon, Portugal	(J):50/250kW::EEU (D)Su:50/250kW::EEU (J)Su:50/250kW::EEU
	VOICE OF AMERICA Via M'rovia, Liberia	M-F:50kW:ENGLISH,FRENCH,ETC:AF
	VOICE OF AMERICA Via Woofferton, UK	(D):300kW::WUSSR
21505	**CZECHOSLOVAKIA** RADIO PRAGUE Prague	120kW::ME/EAF (J):120kW::ME/EAF M-F:120kW::ME/EAF
21510	**USA** RFE-RL Via Germany (FR)	250kW::WUSSR (D):250kW::WUSSR (J):250kW::WUSSR
	RFE-RL Via Lisbon, Portugal	(J):50/250kW::WUSSR
21520	**USA** VOICE OF AMERICA Via Woofferton, UK	(D):250kW::USSR

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Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
21525	USA WYFR-FAMILY RADIO Okeechobee,Florida	100kW::WAF/SAF (J):100kW::WAF/SAF
21530	USA RFE-RL Via Lisbon, Portugal	(D):50/250kW::EEU (J):50/250kW::WUSSR
21535	SOUTH AFRICA RADIO RSA Meyerton	(J)Su:500kW::AF/EU
21540	GERMANY (DR) RADIO BERLIN INTL Nauen	500kW:ENG,GERMAN,HINDI:SAS/SEA 500kW:ENG,GERMAN,HINDI:EAS/ANZ
	GERMANY (FR) DEUTSCHE WELLE Via Sri Lanka	300kW::ME/SAS
	HOLLAND RADIO NEDERLAND Via Neth Antilles	Su:300kW::SA
	USA VOICE OF AMERICA Via Philippines	(J):50kW::SAS/SEA
	VOICE OF AMERICA Via Tangier,Morocco	(J):35kW::WUSSR
21550	USA VOICE OF AMERICA Via M'rovia, Liberia	Sa/Su:250kW::AF
21555	SWEDEN SVERIGES RIKSRADIO Varberg	100kW:USB:DS-1:ME/SAS/SEA 100kW:USB:DS-1:ME/AF (D):100kW:USB:DS-1:ME/SAS/SEA (D):100kW:USB:DS-1:ME/AF (J):100kW:USB:DS-1:ME/SAS/SEA (J):100kW:USB:DS-1:ME/AF
21560	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::SEA/ANZ
	DEUTSCHE WELLE Via Kigali, Rwanda	250kW::SEA/ANZ
	ITALY RTV ITALIANA Rome	Alternative Frequency to 17715kHz
	USA VOICE OF AMERICA Dixon, California	M-F:250kW::CA/SA
21565	USSR RADIO MOSCOW/RP&P Armavir	240kW::SAS
21570	USA VOICE OF AMERICA Via Tangier,Morocco	(J):35kW::ME/WUSSR
	VOICE OF AMERICA Via Woofferton, UK	(J):300kW::WUSSR/ME
21575	SPAIN R EXTERIOR ESPANA Noblejas	350kW::ME F-W:350kW::ME Th:350kW:LADINO:ME
21580	USA VOICE OF AMERICA Greenville, NC	250kW::CA/SA
21585	USSR RADIO MOSCOW/RP&P Dushanbé	(J):100kW:WS,VIETNAMESE,ETC:SEA
21590	SOUTH AFRICA RADIO RSA Meyerton	500kW::AF/WEU (D):500kW::AF/WEU
	USA VOICE OF AMERICA Cincinnati, Ohio	M-F:250kW::SA
21600	GERMANY (FR) DEUTSCHE WELLE Jülich	(J):100kW::AF
21605	UNITED ARAB EMIRATES UAE RADIO Dubai	300kW::EU

World Time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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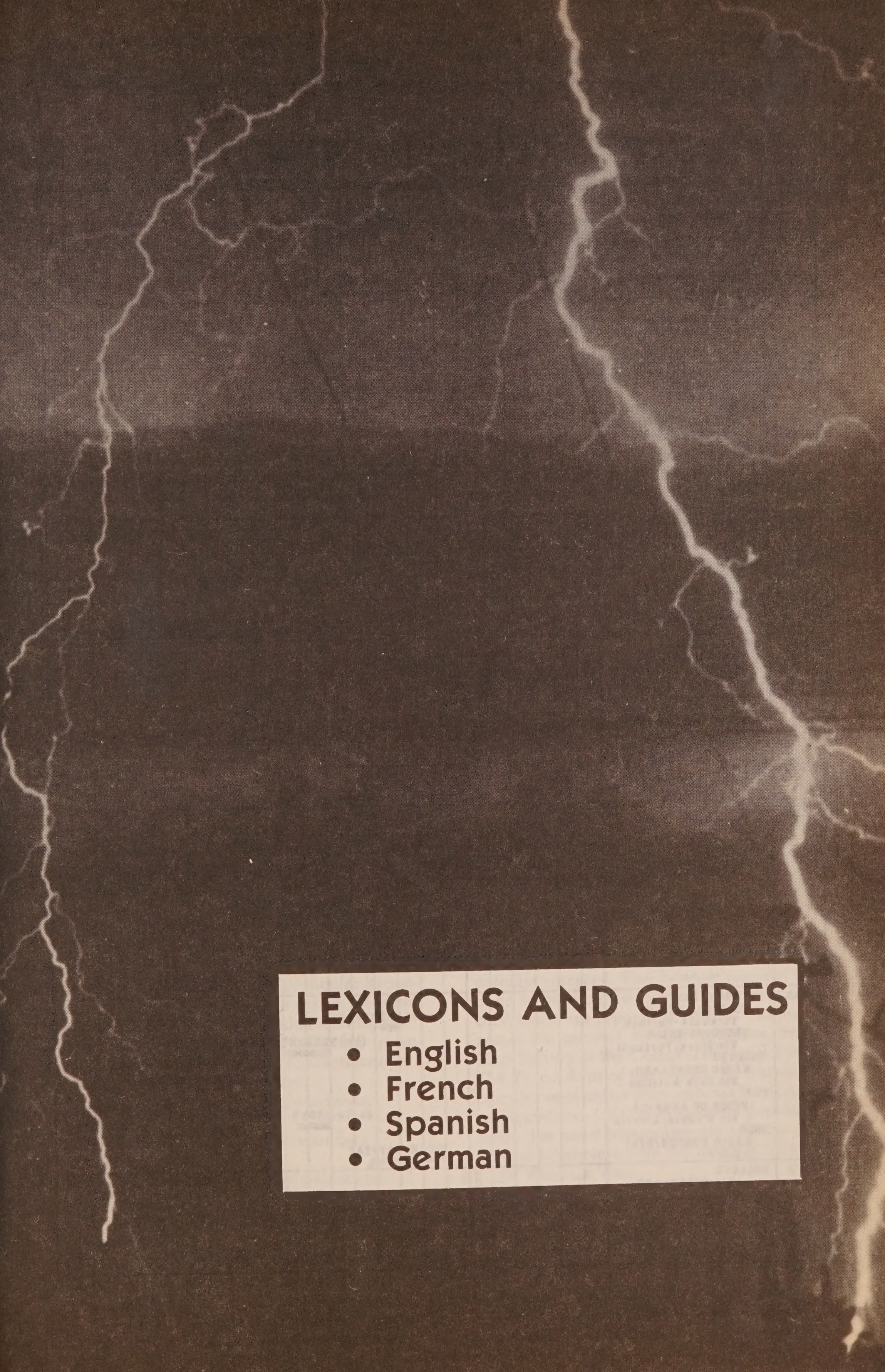
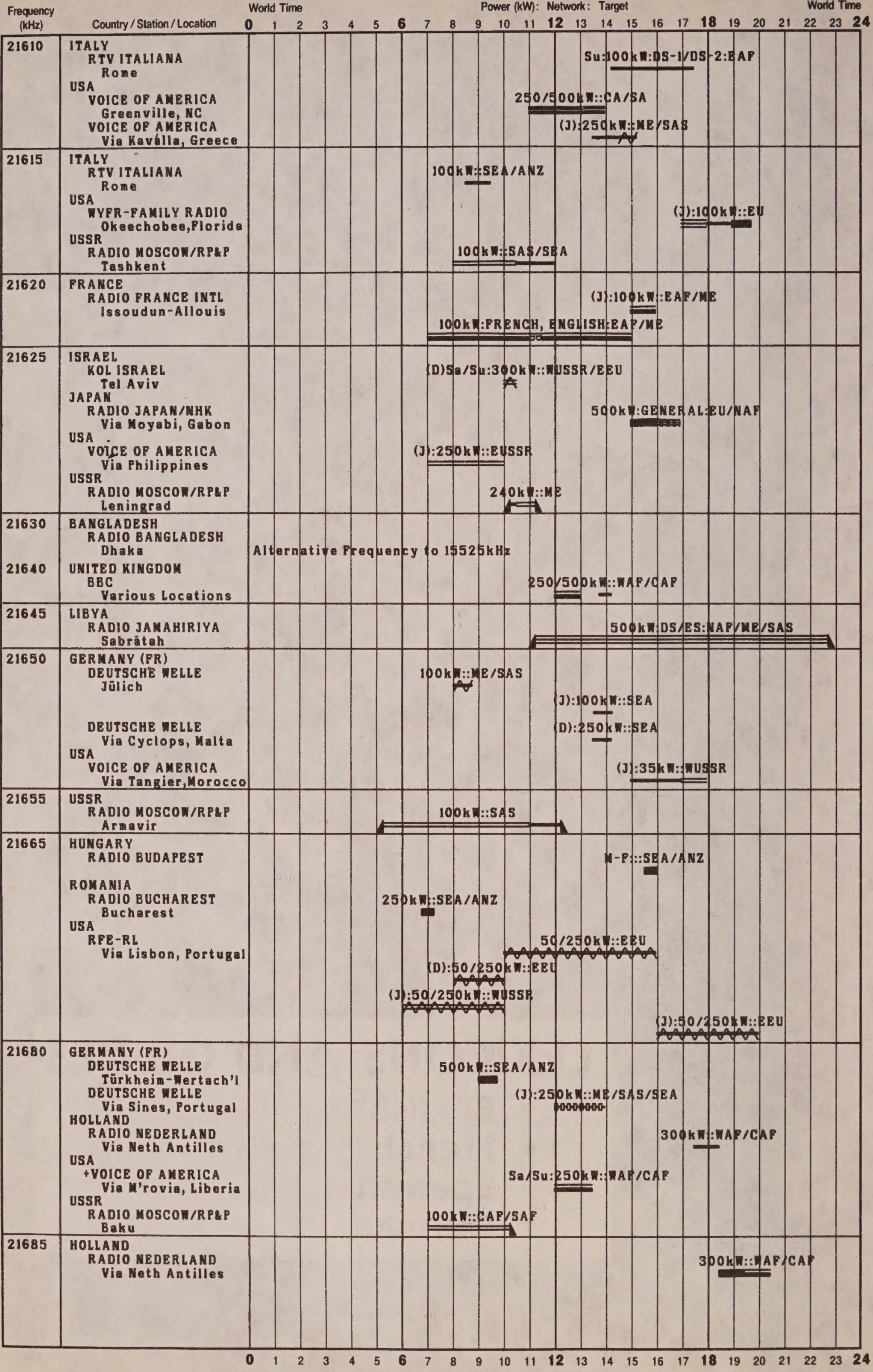


LEXICONS AND GUIDES

- English
- French
- Spanish
- German



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
21610	ITALY RTV ITALIANA Rome	Su:100kW:DS-1/DS-2:EAF
	USA VOICE OF AMERICA Greenville, NC	250/500kW::CA/SA
	VOICE OF AMERICA Via Kaválla, Greece	(J):250kW::ME/SAS
21615	ITALY RTV ITALIANA Rome	100kW::SEA/ANZ
	USA WYFR-FAMILY RADIO Okeechobee,Florida	(J):100kW::EU
	USSR RADIO MOSCOW/RP&P Tashkent	100kW::SAS/SEA
21620	FRANCE RADIO FRANCE INTL Issoudun-Allouis	(J):100kW::EAF/ME 100kW:FRENCH, ENGLISH:EAF/ME
21625	ISRAEL KOL ISRAEL Tel Aviv	(D)Sa/Su:300kW::WUSSR/EEU
	JAPAN RADIO JAPAN/NHK Via Moyabi, Gabon	500kW:GENERAL:EU/NAF
	USA VOICE OF AMERICA Via Philippines	(J):250kW::EUSSR
	USSR RADIO MOSCOW/RP&P Leningrad	240kW::ME
21630	BANGLADESH RADIO BANGLADESH Dhaka	Alternative Frequency to 15525kHz
21640	UNITED KINGDOM BBC Various Locations	250/500kW::WAF/CAF
21645	LIBYA RADIO JAMAHIRIYA Sabrātah	500kW:DS/ES:NAF/ME/SAS
21650	GERMANY (FR) DEUTSCHE WELLE Jülich	100kW::ME/SAS (J):100kW::SEA
	DEUTSCHE WELLE Via Cyclops, Malta	(D):250kW::SEA
	USA VOICE OF AMERICA Via Tangier,Morocco	(J):35kW::WUSSR
21655	USSR RADIO MOSCOW/RP&P Armavir	100kW::SAS
21665	HUNGARY RADIO BUDAPEST	M-F:::SEA/ANZ
	ROMANIA RADIO BUCHAREST Bucharest	250kW::SEA/ANZ
	USA RFE-RL Via Lisbon, Portugal	50/250kW::EEU (D):50/250kW::EEU (J):50/250kW::WUSSR (J):50/250kW::EEU
21680	GERMANY (FR) DEUTSCHE WELLE Türkheim-Wertach'l	500kW::SEA/ANZ
	DEUTSCHE WELLE Via Sines, Portugal	(J):250kW::ME/SAS/SEA
	HOLLAND RADIO NEDERLAND Via Neth Antilles	300kW::WAF/CAF
	USA +VOICE OF AMERICA Via M'rovia, Liberia	Sa/Su:250kW::WAF/CAF
	USSR RADIO MOSCOW/RP&P Baku	100kW::CAF/SAF
21685	HOLLAND RADIO NEDERLAND Via Neth Antilles	300kW::WAF/CAF

ENGLISH ▬ GERMAN / DEUTSCH ▬ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ▬
ARABIC / عربي ═ RUSSIAN / PYCCKИИ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ▬ OTHER —
SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

Lexicon of Terms

Alt. Alternative Frequency: Frequency that may be irregularly or unexpectedly brought into use in lieu of the regularly scheduled frequency.

AV. A Voz.

BC. Broadcasting, Broadcasting Company, Broadcasting Corporation.

BS. Broadcasting Service, Broadcasting Station.

Cd. Ciudad.

Channel. The norm for channel spacing within the shortwave broadcasting spectrum is 5.0 kHz. A small proportion of stations does not operate within this norm, so Radio Database International provides frequency resolution to better than one kHz to aid in station location and identification.

Cl. Club, Clube.

Country. Country designations of officially recognized nations are those of the International Telecommunication Union. Unofficial broadcasters and geographical entities are included for reference purposes only and do not imply endorsement or recognition by IBS or the ITU.

Cu, Cult. Cultura, Cultural, Culture.

(D). Winter schedule only.

DS. Domestic Service.

Earliest Heard, Latest Heard. If the Radio Database International monitoring team cannot establish the definite sign-on (or sign-off) of a station, the earliest (or latest) time the station could be traced is entered, instead.

Ed, Educ. Educational, Educação, Educadora.

Em. Emissora, Emisora, Emissor, Emetteur.

EP. Emissor Provincial.

ER. Emissor Regional.

ES. External Service.

F. Friday.

Feeder, shortwave. A Fixed service (point-to-point) transmission, usually in single or independent sideband mode, beamed to a relay site. Although not intended for reception by the public, shortwave feeder transmissions, which can be received on better communications receivers, sometimes provide the best or only means for reception of a particular broadcaster at a given time. For this reason, selected shortwave feeder data is included in Radio Database International, even though any given actual useage may be irregular. Transmission modes for shortwave feeders are:

LSB—Lower Sideband (single-sideband signal)
ISL—Lower Sideband (of independent-sideband signal)
USB—Upper Sideband (single-sideband signal)
ISU—Upper Sideband (of independent sideband signal)
RAM—Double Sideband, Reduced Carrier signal

FR. Federal Republic.

Frequency. The measurement most widely accepted to indicate the location of a station within the radio spectrum. Frequency is most often expressed in kilohertz (kHz) or Megahertz (MHz), although wavelength is still used in Eastern Europe and certain other parts of the world. The frequency of a station may be determined from the wavelength via the following formula: Frequency (kHz) = 299,792/Wavelength (Meters). Also, cf. "Wavelength" and "Channel".

Irr. Irregular operation or hours of operation; i.e., schedule tends to be unpredictable.

Is. Island(s).

(J). Summer schedule only.

Jamming. Deliberate interference to a transmission with the intent of making reception impossible. The majority of jamming currently emanates from the Soviet Union and its Eastern European allies and is directed against broadcasts in Armenian, Azerbaijain, Belorussian, Bulgarian, Czech, Estonian, Georgian, Hebrew, Latvian, Lithuanian, Polish, Russian, Slovak, Tatar-Bashkir, Turkestani, Ukrainian, and Yiddish. Soviet/Eastern European jamming consists largely of a sound not unlike that of a roomful of truck or lorry engines roaring away. Coded messages appear now and then amidst the roaring, and in some instances distorted programming from the Soviet "Mayak" (DS-2) home service is mixed in, as well. One means to cope with jamming interference is to determine which bands are most likely to provide good reception from the part of the world you wish to hear, while at the same time are not likely to provide good reception from the Soviet Union and Eastern Europe. Directional antennas also can improve the signal-to-jamming ratio under certain circumstances.

kHz. Kilohertz (cf. Frequency).

kW. Kilowatts(s) (cf. Power).

Loc. Local.

Location. The physical location of the transmitter/antenna complex. This location may not correspond to the location of the studios in which the broadcasts are prepared. Data on location names are derived, in most instances, from the Map Section of the Comprehensive Edition of *The Times Atlas of the World.* As transmitter complexes of major international broadcasters are sometimes located in sparsely populated areas, the exact transmitter site may be up to several kilometers from the location indicated.

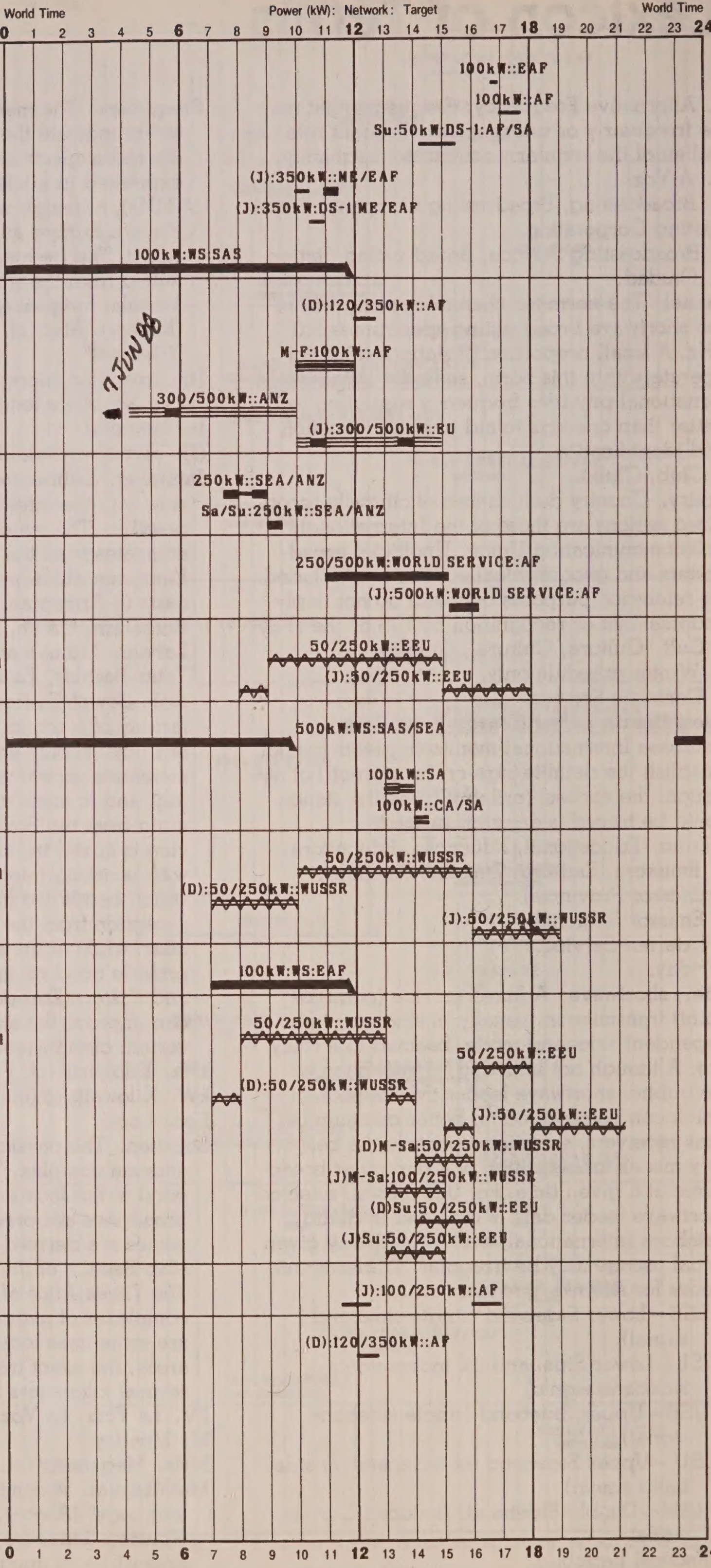
LV. La Voix, La Voz.

M. Monday.

MHz. Megahertz (cf. Frequency).

Multilingual. A combination of any "graphics language" (Arabic, Chinese, English, French German, Japanese, Portuguese, Russian, Spanish) with another language. Thus, a

Photo page 385: Lightning can play havoc with electronic equipment. Courtesy Florida Power and Light



Frequency (kHz)	Country / Station / Location	Power (kW): Network: Target
21690	**ITALY** RTV ITALIANA Rome	100kW::EAF 100kW::AF Su:50kW:DS-1:AF/SA
	SWEDEN RADIO SWEDEN INTL Hörby	(J):350kW::ME/EAF
	SVERIGES RIKSRADIO Hörby	(J):350kW:DS-1:ME/EAF
	USSR RADIO MOSCOW/RP&P Irkutsk	100kW:WS:SAS
21700	**NORWAY** RADIO NORWAY INTL Fredrikstad	(D):120/350kW::AF
	PORTUGAL RADIO PORTUGUESA Lisbon-São Gabriel	M-F:100kW::AF
	UNITED ARAB EMIRATES UAE RADIO Dubai	300/500kW::ANZ (J):300/500kW::EU
21705	**CZECHOSLOVAKIA** RADIO PRAGUE Prague	250kW::SEA/ANZ Sa/Su:250kW::SEA/ANZ
21710	**UNITED KINGDOM** BBC Various Locations	250/500kW:WORLD SERVICE:AF (J):500kW:WORLD SERVICE:AF
21720	**USA** RFE-RL Via Lisbon, Portugal	50/250kW::EEU (J):50/250kW::EEU
21725	**USSR** RADIO MOSCOW/RP&P Vladivostok	500kW:WS:SAS/SEA
	VATICAN STATE VATICAN RADIO Sta Maria di Galeria	100kW::SA 100kW::CA/SA
21735	**USA** RFE-RL Via Lisbon, Portugal	50/250kW::WUSSR (D):50/250kW::WUSSR (J):50/250kW::WUSSR
21740	**USSR** RADIO MOSCOW/RP&P Yerevan	100kW:WS:EAF
21745	**USA** RFE-RL Via Lisbon, Portugal	50/250kW::WUSSR 50/250kW::EEU (D):50/250kW::WUSSR (J):50/250kW::EEU (D)M-Sa:50/250kW::WUSSR (J)M-Sa:100/250kW::WUSSR (D)Su:50/250kW::EEU (J)Su:50/250kW::EEU
21810	**BELGIUM** BELGISCHE RADIO TV Wavre	(J):100/250kW::AF
25730	**NORWAY** RADIO NORWAY INTL Fredrikstad	(D):120/350kW::AF

ENGLISH ▬ GERMAN / DEUTSCH ▭ FRENCH / FRANÇAIS ═ PORTUGUESE / PORTUGUÊS ▬ SPANISH / ESPAÑOL ═

ARABIC / عربي ≡ RUSSIAN / РУССКИЙ ═ CHINESE / 中文 ▭ JAPANESE / 日本語 ▬ MULTILINGUAL ≡ OTHER —

SUMMER ONLY (J) WINTER ONLY (D) JAMMING /\/\ or / or \ EARLIEST HEARD ◢ LATEST HEARD ◣ + TENTATIVE

transmission in English and Urdu would be designated as Multilingual rather than English, whereas a transmission in Tamil and Urdu would be designated as Other.

N. New, Nueva, Nuevo, Nouvelle, Nacional, National.

Nac. Nacional.

Nat, Natl. National, Nationale.

Network. The Network or service of a broadcast Domestic Service transmissions are always so indicated by "DS".

PBS. People's Broadcasting Station.

Power. RF output power, i.e. before amplification by the antenna, in kilowatts (kW). The present range of powers in use for shortwave broadcasting is 0.04–600 kW.

PR. People's Republic.

PS. Provincial Station, Pangsong.

Pto. Puerto, Pôrto.

R. Radio, Radiodiffusion, Radiodifusora, Radiodifusão, Radiofonikos, Radiostansiya, Radyo, Radyosu, etc.

Reg. Regional.

Relay. Extraterritorial transmission facility, usually fed by recording, satellite, or shortwave feeder (cf.).

Rep. Republic, République, Republica.

RT, RTV. Radiodiffusion Télévision, Radio Télévision, etc.

RN. Cf. R and N.

RS. Radio Station, Radiostantsiya, Radiofonikos Stathmos.

S. San, Santa, Santo, São, Saint.

Sa. Saturday.

Shortwave Spectrum. The shortwave, or world band spectrum is that portion of the radio spectrum that lies between 3–30 MHz (3,000–30,000 kHz); however, common usage places the shortwave spectrum between roughly 2–30 MHz. Although broadcasting takes place throughout the shortwave spectrum (between-band broadcasting is known as "out-of-band" broadcasting, which is sometimes permitted under the Rules and Regulations of the ITU), the nominal ITU shortwave broadcasting band parameters are (worldwide unless otherwise indicated):

120 Meter Band:
2300–2498 kHz (Tropical Domestic Broadcasting only)

90 Meter Band:
3200–3400 kHz (Tropical Domestic Broadcasting only)

75 Meter Band:
3900–3950 kHz (Asia & Pacific only)
3950–4000 kHz (except Americas)

60 Meter Band:
4750–4995 kHz (Tropical Domestic Broadcasting only)
5005–5060 kHz (Tropical Domestic Broadcasting only)

49 Meter Band:
5950–6200 kHz

41 Meter Band:
7100–7300 kHz (except Americas)

31 Meter Band:
9500–9900 kHz

25 Meter Band:
11650–12050 kHz

21 Meter Band:
13600–13800 kHz

19 Meter Band:
15100–15600 kHz

16 Meter Band:
17550–17900 kHz

13 Meter Band:
21450–21850 kHz

11 Meter Band:
25670–26100 kHz

St. Saint.

Sta. Santa.

Sto. Santo.

Su. Sunday.

Target. The international geographical entities to which a transmission is beamed, provided it is intended to be heard outside the country. Targets are as follows:

AF—Africa
AM—Americas
ANZ—Australia & New Zealand
AS—Asia
ATL—Atlantic
CA—Central America, Carribean & Mexico
CAF—Central Africa
EAF—Eastern Africa
EAS—Eastern Asia
EEU—Eastern Europe
ENA—Eastern North America
EU—Europe
EUSSR—Eastern USSR
ME—Middle East
NA—North America
NAF—Northern Africa
PAC—Pacific
SA—South America
SAF—Southern Africa
SAS—Southern Asia
SEA—South-East Asia
USSR—USSR
WAF—Western Africa
WEU—Western Europe
WNA—Western North America
WUSSR—Western USSR

(+) Tent. Tentative, i.e. uncertain of accuracy of certain listed details, e.g. exact station name.

Th. Thursday.

Tu. Tuesday.

UTC. Coordinated Universal Time a/k/a Greenwich Mean Time (GMT) or Zulu (Z): the 24-hour international broadcasting reference, based on the time standard of the Greenwich

Observatory in the U.K. The difference between UTC and local time may be determined by listening for routine UTC announcements aired by international broadcasters. Some shortwave radios and digital watches come equipped with a 24-hour time standard to eliminate the necessity to convert local time to UTC.

v. Variable frequency, i.e. one that is unstable or drifting.

Vo. Voice of.

W. Wednesday.

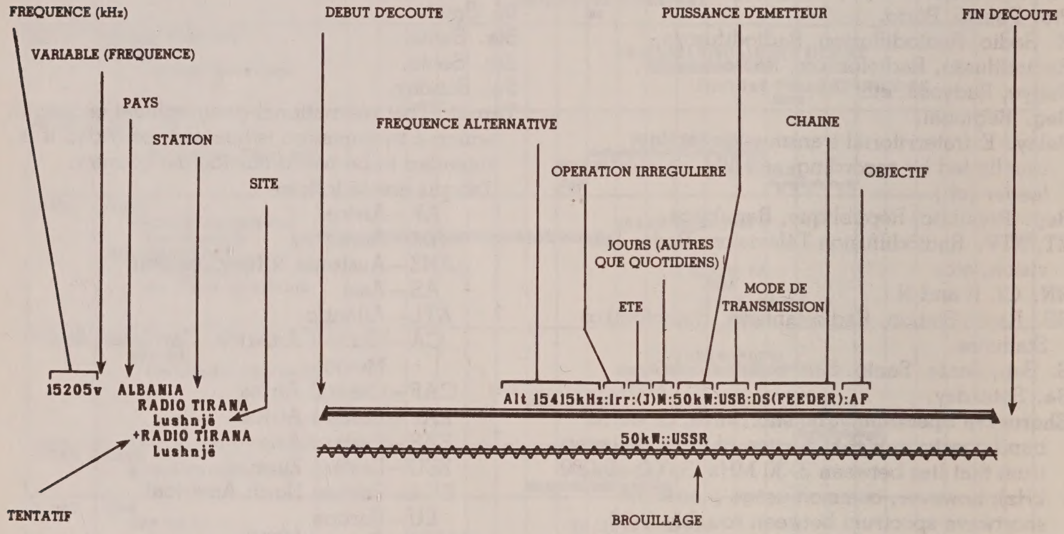
Wavelength. A vintage alternative to Frequency (cf.) to express the location of a station within the radio spectrum. The wavelength of a station may be determined via the following formula: Wavelength (Meters) = 299,792/Frequency (kHz). This formula may also be used to ascertain the meter band of a particular station (cf. Shortwave Spectrum).

World Time. See "UTC."

WS. World Service.

For countries where savings time is used, schedules may vary by an hour during summer.

GUIDE DE WORLDSCAN


FREQUENCE (kHz)
VARIABLE (FREQUENCE)
PAYS
STATION
SITE
DEBUT D'ECOUTE
FREQUENCE ALTERNATIVE
OPERATION IRREGULIERE
JOURS (AUTRES QUE QUOTIDIENS)
ETE
PUISSANCE D'EMETTEUR
MODE DE TRANSMISSION
CHAINE
OBJECTIF
FIN D'ECOUTE
15205v
ALBANIA
RADIO TIRANA
Lushnjë
+RADIO TIRANA
Lushnjë
Alt 15415kHz:Irr:(J)M:50kW:USB:DS(FEEDER):AP
50kW::USSR
TENTATIF
BROUILLAGE

Lexique

Alt. Fréquence Alternative. Pas toujours utilisée.

AV. A Voz.

BC. Broadcasting, Broadcasting Company, Broadcasting Corporation.

BS. Broadcasting Service, Broadcasting Station.

Cd. Ciudad.

Canal. La norme pour l'espace réservé à un canal est de 5 kHz. Un petit nombre de stations ne suivent pas cette norme. Pour cela, Radio Database International publie une résolution de fréquence supérieure à un kilohertz afin de faciliter l'identification de la station émettrice.

Cl. Club, Clube.

Cu, Cult. Cultura, Culture.

(D). Horaire uniquement pour l'hiver.

DS. Service Local.

Earliest Heard, Latest Heard. Début et fin d' Ecoute—Si les moniteurs qui suivent les stations de radiodiffusion ne peuvent pas établir, d'une manière certaine, les débuts ou les fins d'émission, ils fournissent à *Passport* les horaires les plus tôt (pour le début) et les plus tard (pour la fin) des émissions qu'ils ont pu entendre sur la station en question.

Ed, Educ. Educational, Educação, Educadora.

Em. Emissora, Emisora, Emissor, Emetteur.

EP. Emetteur Provincial.

ER. Emetteur Régional.

F. Vendredi.

Feeder, shortwave. Ligne d'alimentation, ondes courtes. Consiste en une émission d'un point fixe à un autre, généralement en bandes

latérales indépendantes ou bandes latérales uniques, dirigée vers un relais à partir d'un pays où se situe la station de radiodiffusion. Bien que cette méthode de transmission ne soit pas destinée à être captée par le public, les transmissions d'ondes courtes par ligne d'alimentation peuvent être captées par certains récepteurs qui permettent parfois un meilleur, ou même le seul, moyen de recevoir certaines émissions pendant certaines périodes. C'est pour cette raison que les données concernant des lignes d'alimentation sont incluses dans *Passport* bien que leur usage soit irrégulier. Les modes de transmission par ligne d'alimentation sont:

LSB—Bande à latérale inférieure (signal à bande latérale unique)
ISL—Bande à latérale inférieure (d'un signal à bande latérale indépendante)
USB—Bande à latérale supérieure (signal à bande latérale unique)
ISU—Bande à latérale supérieure (d'un signal à bande latérale indépendante)
RAM—Bande à latérale double, signal à porteuse réduite.

FR. République Fédérale.

Fréquence. Est la mesure généralement adoptée pour identifier la station émettrice sur les bandes du récepteur. La fréquence est, le plus souvent, exprimée en kilohertz ou en mégahertz, bien que les longueurs d'ondes soient encore utilisées en Europe et dans certains autres pays. Les longueurs d'ondes sont exprimées en mètres. Les formules suivantes permettent de passer d'une mesure à l'autre:

Fréquence en kilohertz = 299,792/Longueur d'onde en mètres.

Irr. Opération ou heures d'opération irrégulières.

Is. Iles.

(J). Horaire uniquement pour l'été.

Jamming. Brouillage—Interférence provoquée délibérément pour rendre la réception soit impossible, soit très difficile. La majorité des brouillages provient de l'Union Soviétique ou des pays de l'Europe de l'Est et est dirigée contre des émissions en arménien, azerbaijani, biellorusse, bulgare, estonien, georgien, hébreu, latvien, lituanien, polonais, russe, slovaque, tartar-bashkir, tchèque, turkestan, ukrainien et yiddish. Les brouillages en provenance de l'URSS et de l'Europe de l'Est produisent un bruit similaire à des ronflements de moteur. De temps à autre, des messages codés ou même des programmes altérés provenant du service "Mayak" (DS-2) de l'URSS apparaissent parmi ces brouillages. L'un des moyens de surmonter ces difficultés de réception est d'utiliser les bandes les plus susceptibles de donner une bonne réception du pays que vous désirez écouter et qui, aux mêmes heures, ont le moins de possibilité de donner une bonne réception de l'Union Soviétique ou des pays de l'Europe de l'Est. Une antenne directionnelle peut, dans certaines conditions, améliorer le rapport signal/brouillage.

kHz. kilohertz (cf. "Fréquence").

kW. kilowatt(s), (cf. "Puissance").

Location. Le lieu où est situé le complexe émetteur/antenne. Ce "site" ne correspond pas nécessairement à celui des studios qui préparent les programmes. Les sites publiés par *Passport* proviennent, dans la plupart des cas, de la section "Cartes" de l'Edition de la "Comprehensive Edition of *The Times Atlas of the World".* Dans certains cas, les complexes émetteurs/antennes des grandes compagnies de radiodiffusion sont situés à plusieurs kilomètres du lieu indiqué dans *Passport.*

LV. La Voix, La Voz.

M. Lundi.

MHz. Mégahertz (cf. "Frequence").

Multilingual. Une combinaison des langues "graphiques" (l'anglais, l'allemand, le chinois, le japonais, le portugais, le russe, le français, et l'espagnol) avec une autre langue.

N. New, Nueva, Nuevo, Nouvelle, National.

Nac. Nacional.

Nat, Natl. National, Nationale.

Network. Chaîne ou Service Ondes Courtes. En dehors de désignations évidentes telles que "Service Mondial". Les services locaux d'ondes courtes sont indiqués par "DS."

Objectif. L'entité internationale vers laquelle l'émission est dirigée, dans l'intention que l'émission soit entendue à l'etranger. Les objectifs sont les suivants:

AF—Afrique.
AM—Amériques.
ANZ—Australie et Nouvelle-Zélande.
AS—Asie.
ATL—Atlantique.
CA—Amérique Centrale, les Caraïbes et le Mexique.
CAF—Afrique Centrale.
EAF—Afrique de l'Est.
EAS—Asie de l'Est.
EEU—Europe de l'Est.
ENA—L'Est de l'Amérique du Nord.
EU—Europe.
EUSSR—Partie Est de l'URSS.
ME—Moyen Orient.
NA—Amérique du Nord.
NAF—Afrique du Nord.
PAC—Pacifique.
SA—Amérique du Sud.
SAF—Région sud Africaine.
SAS—Sud de l'Asie.
USSR—URSR
WAF—Afrique de l'Ouest.
WEU—Europe de l'Ouest.
WNA—Ouest de l'Amérique du Nord.
WUSSR—Ouest de l'URSS.

Pays. Les noms de pays publiés dans *Passport* sont ceux spécifiés par l'UIT. Certaines stations non officielles et d'autres entités géographiques sont incluses à titre de référence, mais n'indiquent d'aucune manière l'endossement ou la reconnaissance de ces stations de la part, soit de IBS, soit de UIT.

PBS. Station nationale où locale de Radiodiffusion de la République populaire de Chine.

Power. Puissance—La puissance RF d'emission en kilowatts avant l'amplification par l'antenne. Actuellement, les puissances utilisées en émission se situent entre 0,04 et 600 kW.

PR. République Populaire.

Pto. Puerto.

R. Radio, Radiodiffusion, Radiodiffusora, Radiodifusão, Radiostantsiya, Radyo, Radyosu, etc.

Reg. Régional.

Relais. Est une installation extraterritoriale généralement alimentée par des enregistrements, par satellite ou par ligne d'alimentation, ondes courtes.

Rep. République.

RTV. Radiodiffusion Télévision.

RN. Cf. R and N.

RS. Radio Station, Radiostantsiya, Radiofonikos Stathmos.

S. Sa, Santa, Santo, São, Saint.

Sa. Samedi.

Spectre Ondes Courtes. Le spectre ondes courtes ou world band est la partie du spectre radiodiffusée entre 3 et 30 MHz (3.000–30.000 kHz); cependant, l'usage le plus fréquent est approximativement entre 2 et 30 MHz. Bien que les radiodiffusions aient lieu sur toutes les bandes ondes courtes, les bandes désignées par UIT pour la radiodiffusion ondes courtes sont: (Mondialement à moins qu'il ne soit indiqué autrement):

Bande 130 Mètres:
2300–2498 kHz (Zones tropicales exclusivement).

Bande 90 Mètres:
3200–3400 kHz (Zones tropicales exclusivement).

Bande 75 Mètres:
3900–3950 kHz (Asie et Pacifique seulement).
3950–4000 kHz (à l'exception des Amériques.

Bande 60 Mètres:
4750–4995 kHz (Zones tropicales exclusivement).
5005–5060 kHz (Zones tropicales exclusivement).

Bande 49 Mètres:
5950–6200 kHz.

Bande 41 Mètres:
7100–7300 kHz (sauf les Amériques)

Bande 31 Mètres:
9500–9900 kHz

Bande 25 Mètres:
11650–12050 kHz

Bande 21 Mètres:
13600–13800 kHz

Bande 19 Mètres:
15100–15600 kHz

Bande 16 Mètres:
17550–17900 kHz

Bande 13 Mètres:
21450–21850 kHz

Bande 11 Mètres:
25670–26100 kHz

St. Saint.

Sta. Santa.

Sto. Santo.

Su. Dimanche.

(+). Tentatif.

Th. Jeudi.

Tu. Mardi.

UTC. Heure Universelle Coordonnée: Heure Internationale de référence pour les radiodiffusions, basée sur l'heure standard du méridien de l'Observatoire de Greenwich (GMT) en Angleterre. Les Chaînes Internationales de Radiodiffusion annoncent régulièrement la différence entre l'heure locale et l'Heure Universelle Coordonnée. Certains récepteurs ou montres digitales sont munis d'un cadran 24-heures qui permet de connaître la relation entre l'heure locale et celle de UTC.

v. Fréquence variable.

Vo. Voix de.

W. Mercredi.

Wavelength. Longueur d'Onde. Exprime la place qu'occupe une station sur le spectre radiodiffusé. Un terme maintenant moins souvent utilisé que le terme fréquence. Longueur d'onde et fréquence sont liées par la formule:

Longueur d'onde en mètres = 299,792 divisé par la fréquence en kHz.

Cette formule peut, naturellement, être utilisée pour déterminer la Bande en mètres d'une station.

World Time. cf. UTC.

WS. Service Mondial.

Lexico de Terminos

Alt. Frecuencia alternativa; una frecuencia cuyo uso sea imprevisto o irregular y en lugar de la frecuencia asignada.

AV. A Voz.

BC. Broadcasting, Broadcasting Company, Broadcasting Corporation.

Cd. Ciudad.

Channel. Canal. La norma para la separación de canales dentro de la gama de radiodifusión de onda corta es de 5.0 kHz. Un pequeño porcentaje de estaciones no opera dentro de esta norma, así que el Radio Database International proporciona resolución de frecuencia de menos de un kilohertz, para facilitar la ubicación e identifación de las estaciones.

Cl. Club, Clube.

Country. País. Las desgnaciones, en el caso de las naciones oficialmente reconocidas, son las de la Unión Internacional de Telecomunicaciones. Emisoras y entidades geográficas no oficiales se incluyen para los fines de referencia y no presupone ningún apoyo o reconocimiento por parte de la IBS o UIT.

Cu, Cult. Cultura, Cultural, Culture.

(D). Indica que los detalles refieren solamente al período "D" que corresponde al invierno en el hemisferio del norte y al verano en los paises del sur.

DS. Domestic Service (Servicio Doméstico).

Earliest heard, Latest heard. Si el equipo de monitores del RDI no puede establecer definitivamente el comienzo (o fin) de una transmisión, se entra en cambio la hora más temprana (o tarde) en que pudo rastrearse la estación.

Ed, Educ. Educação, Educadora.

Em. Emissora, Emisora, Emissor, Emetteur.

EP. Emissor Provincial.

ER. Emissor Regional.

ES. External Service (Servicio al Exterior).

F. Friday (Viernes).

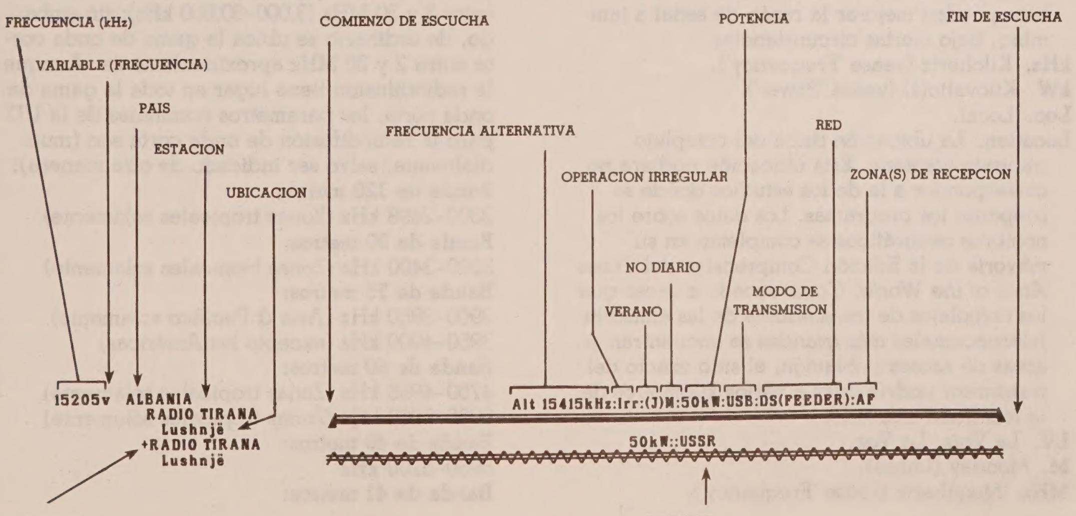
Feeder, shortwave. Una transmisión de servicio fijo (punto a punto) usualmente en modo de banda lateral única o independiente, dirigida a la estación de redifusión desde el país de origen de la transmisión. Aunque no destinadas para la recepcion general, las transmisiones de eslabón de onda corta, que pueden ser recibidas por los mejores receptores de comunicaciones, a veces proporcionan la mejor o única oportunidad para la recepción de una emisora determinada a una hora dada. Por esta razón se incluyen en el Radio Database International datos sobre este tipo de transmisión, aunque el uso actual no sea regular. Los modos de transmisión para los eslabones de onda corta son:

- LSB—Banda lateral inferior (señal banda lateral única)
- ISL—Banda lateral inferior (de una señal banda lateral independiente)
- USB—Banda lateral superior (señal banda lateral única)
- ISU—Banda lateral superior (de una señal banda lateral independiente)
- RAM—Banda lateral doble, con la portadora reducida.

FR. Federal Republic (República Federal)

Frequency. Frecuencia. La medida más ampliamente aceptada para indicar la ubi-

COMO UTILIZAR EL WORLDSCAN


FRECUENCIA (kHz)
VARIABLE (FRECUENCIA)
PAIS
ESTACION
UBICACION
COMIENZO DE ESCUCHA
FRECUENCIA ALTERNATIVA
OPERACION IRREGULAR
NO DIARIO
VERANO
POTENCIA
MODO DE TRANSMISION
RED
ZONA(S) DE RECEPCION
FIN DE ESCUCHA
15205v ALBANIA
RADIO TIRANA
Lushnjë
+RADIO TIRANA
Lushnjë
Alt 15415kHz:Irr:(J)W:50kW:USB:DS(FEEDER):AF
50kW::USSR
TENTATIVO
JAMMING

cación de una estación dentro de la gama radial. La frecuencia se expresa más a menudo en kilohertz (kHz) o Megahertz (MHz), aunque la longitud de onda se utiliza todavía en Europa oriental y algunas otras partes del mundo. La frecuencia de una estación puede determinarse de la siguiente fórmula:

Frecuencia (kHz) = 299,792 ÷ Longitud de onda (metros).

Vease también 'Wavelength' y 'Channel'.

Irr. Operación irregular; horas de operación irregulares.

Is. Isla(s).

(J). Indica que los detalles refieren solamente al período "J" que corresponde al verano en el hemisferio del norte y al invierno en los paises del sur.

Jamming. Interferencia intencional a una transmisión con el propósito de hacer imposible la recepción de la misma. La mayoría del jamming proviene de la Unión Soviética y sus aliados de Europa oriental, y es dirigida contra emisiones en armenio, azerbaijano, beloruso, búlgaro, checo, estonio, georgiano, hebreo, letón, lituano, polaco, ruso, slovaco, tatar-bashkir, turquestano, ucraniano e yiddish. El jamming proveniente de la URSS y Europa oriental consiste mayormente de un ruido no muy diferente de lo de un depósito lleno de camiones los cuales tienen sus motores en plena marcha. De vez en cuando se agrega a este ruido algunos mensajes en clave o programación distorsionada del servicio doméstico soviético, Mayak (DS-2). Una forma de contender con la interferencia jamming es determinar cuales de las bandas podrían ser las más apropriadas para proporcionar buena recepción de la parte del mundo que se quiere escuchar, mientras que al mismo tiempo no darían buena recepción de la Unión Soviética y Europa oriental. Antenas direccionales también pueden mejorar la razón de señal a jamming, bajo ciertas circunstancias.

kHz. Kilohertz (vease 'Frequency').

kW. Kilovatio(s) (vease 'Power').

Loc. Local.

Location. La ubicación física del complejo transmisor/antena. Esta ubicación pudiera no corresponder a la de los estudios donde se preparan los programas. Los datos sobre los nombres geográficos se completan en su mayoría de la Edición Comprensiva del *Times Atlas of the World.* Como sucede a veces que los complejos de transmisores de las emisoras internacionales más grandes se encuentran en áreas de escasa población, el sitio exacto del transmisor podría estar a varios kilometros de la localidad indicada.

LV. La Voix, La Voz.

M. Monday (Lunes).

MHz. Megahertz (vease 'Frequency').

Multilingual. Una combinación de cualquier idioma representado por símbolo gráfico (alemán, árabe, chino, español, francés, inglés, japonés, portugués, o ruso) con otro idioma. Así una transmisión en español y quechua sería designada como 'Multilingual', mientras que una emisión en quechua y aymara sería designada como 'Other' (= Otro).

N. New, Nueva, Nuevo, Nouvelle, Novo, Nova, Nacional, National, Nationale.

Nac. Nacional.

Nat. National, Nationale.

Network. La red o el servicio de una emisión. Transmisiones de servicios domésticos son indicadas por "DS".

PBS. People's Broadcasting Station (Estación de Radiodifusión del Pueblo).

Power. La potencia de salida de RF (radiofrecuencia), eso es, antes de la amplificación, de onda corta es 0.04–600 kW.

PR. People's Republic (República Popular)

PS. Provincial Station (Estación Provincial), Pangsong.

Pto. Puerto, Pôrto.

R. Radio, Radiodiffusion, Radiodifusora, Radiodifusión, Radiodifusão, Radioemisora, Radiofonikos, Radiostantsiya, Radyo, Radyosu, etc.

Reg. Regional.

Relay. Instalaciones transmisoras extraterritoriales que retransmiten programas recibidos por satélite, eslabón de onda corta, o en forma de grabación.

Rep. Republic, República, République.

RT, RTV. Radiodiffusion Télévision, Radio Televisión, etc.

RN. Vease R y N.

S. San, Santa, Santo, São, Saint.

Sa. Saturday (Sábado).

Shortwave Spectrum. La gama de onda corta es esa porción de la gama radial que se encuentra entre 3 y 30 MHz (3,000–30,000 kHz); sin embargo, de ordinario se ubica la gama de onda corta entre 2 y 30 MHz aproximadamente. Aunque la radiodifusión tiene lugar en toda la gama de onda corta, los parametros nominales de la UIT para la radiodifusión de onda corta son (mundialmente, salvo ser indicado de otra manera):

Banda de 120 metros:
2300–2498 kHz (Zonas tropicales solamente)
Banda de 90 metros:
3200–3400 kHz (Zonas tropicales solamente)
Banda de 75 metros:
3900–3950 kHz (Asia & Pacífico solamente)
3950–4000 kHz (excepto las Américas)
Banda de 60 metros:
4750–4995 kHz (Zonas tropicales solamente)
5005–5060 kHz (Zonas tropicales solamente)
Banda de 49 metros:
5950–6200 kHz
Banda de 41 metros:

7100-7300 kHz (excepto las Américas)
Banda de 31 metros:
9500-9900 kHz
Banda de 25 metros:
11650-12050 kHz
Banda de 21 metros:
13600-13800 kHz
Banda de 19 metros:
15100-15600 kHz
Banda de 16 metros:
17550-17900 kHz
Banda de 13 metros:
21450-21850 kHz
Banda de 11 metros:
25670-26100 kHz

St. Saint.

Sta. Santa.

Sto. Santo.

Su. Sunday (Domingo).

Target. Las entidades geográficas internacionales a las cuales se dirige una transmisión, con tal que está destinada fuera del país de origen. Las zonas de recepción son las siguientes:

AF—África
AM—Américas
ANZ—Australia & Nueva Zelandia
AS—Asia
ATL—Atlántico
CA—América Central, Caribe & México
CAF—África Central
EAF—África Oriental
EAS—Asia Oriental
EEU—Europa Oriental
ENA—América del Norte (Este)
EU—Europa
EUSSR—URSS Oriental
ME—Oriente Medio
NA—América del Norte
NAF—África del Norte
PAC—Pacífico
SA—América del Sur
SAF—África Meridional
SAS—Sud Asia
SEA—Asia (Sudeste)
USSR—URSS
WAF—África Occidental
WEU—Europa Occidental
WNA—América del Norte (Oeste)
WUSSR—URSS Occidental

Th. Thursday (Jueves).

Tu. Tuesday (Martes).

UTC. Hora Universal Coordinada, también conocida como Hora Meridiano de Greenwich (GMT) o Zulu (Z): la referencia internacional de 24 horas para la radiodifusión, basada en el marco de tiempo del Observatorio de Greenwich en el Reino Unido. La diferencia entre UTC y la hora local puede determinarse escuchando los avisos rutinarios de la hora UTC transmitidos por emisoras internacionales.

v. Frecuencia variable, eso es, una que es inestable.

Vo. Voice of (Voz de).

W. Wednesday (Miércoles).

Wavelength. Longitud de onda. Una alternativa antigua a 'Frecuencia' (vease) para precisar la ubicación de la estación dentro de la gama radial. La longitud de onda de una estación puede determinarse através de la siguiente fórmula: Longitud de onda (metros) = 299,792 × Frecuencia (kHz). Esta fórmula puede utilizarse también para precisar la banda (en metros) de una estación determinada (vease 'Shortwave Spectrum).

World Time. Vease 'UTC'.

WS. World Service (Servicio Mundial).

(+) Tent. Tentativo (-a); eso es, la exactitud de algunos detalles (p.ej. el nombre exacto de la estación) está incierta.

Glossar

Channel; Kanal. Die Norm für den Abstand verschiedener Sendungen im Kurzwellenspektrum ist 5.0 kHz. Da aber ein kleiner Teil der Stationen nicht gemäss dieser Norm funktioniert, bietet *Passport* Frequenzgenauigkeit von besser als einem kHz für die Lage und Identifizierung von Stationen.

Country; Land. Die Namen für die verschiedenen Länder sind diejenigen der ITU. Inoffizielle Sender und geographische Einheiten werden nur zur Bequemlichkeit erwähnt und bedeuten nicht formale Anerkennung oder Endorsement von IBS oder ITU.

Earliest Heard, Latest Heard; Hineinschwinden, Herausschwinden. Falls die Moniteure der Databasis nicht den Anfang oder das Ende einer Sendung genau bestimmen können, dann wird die früheste oder späteste Zeit angegeben, wann die Station gehört werden kann.

Feeder, shortwave; Kurzwellenspeisesender oder Versorger. Eine Punkt-zu-Punkt bestimmte Sendung zu einer Relaisstation, gewöhnlich durch einzelnes oder unabhängiges Seitenband. Manchmal kommt es vor, dass gewisse Rundfunkprogramme am besten oder nur durch "feeder" gehört werden können, obgleich sie eigentlich nicht für die Öffentlichkeit beabsicht sind und auch bessere Empfänger benötigen. Aus diesem Grunde enthält Radio Database International Information über Kurzwellen "feeder", obwohl es möglich ist, dass tatsächlicher Gebrauch nicht immer regelmässig ist.

Sendearten für Kurzwellen "feeder" sind wie folgt:

LSB—Lower Sideband (single-sideband signal); Unteres Seitenband

USB—Upper Sideband (single-sideband signal); Oberes Seitenband

ISL—Lower Sideband (of independent-sideband signal); Unteres Seitenband (von einem unabhängigen Seitenband Signal)

ISU—Upper Sideband (of independent sideband signal); Oberes Seitenband (von einem unabhängigen Seitenband, Signal)

RAM—Double Sideband, reduced carrier signal; Doppeltes Seitenband, reduziertes Träger Signal

Anmerkung: Mittelwellen Sendungen, die hauptsächlich dem Inlandsdienst dienen, bestehen aus einem Träger (carrier) und zwei Seitenbändern, die beide dieselbe Information als Spiegelbilder enthalten. Diese Sendeart wird AM genannt und wird auch auf Kurzwelle gebraucht. Indem ein Rundfunksender nur ein Seitenband oder sogar auch keinen Träger gebraucht, spart er Energie, oder falls er doch noch mehr kW gebraucht, dann reicht die Sendung weiter stärker und klarer.

Frequency; Frequenz. Das weitverbreitetste Mass, um die Lage einer Sendung innerhalb des Radiospektrums anzugeben. In Osteuropa und einigen anderen Teilen der Welt wird jedoch noch Wellenlänge gebraucht. Frequenz wird hauptsächlich in Kilohertz (kHz) oder Megahertz (MHz) ausgedrückt. Die Frequenz einer Sendung kann durch die folgende Formel von der Wellenlänge errechnet werden: Frequenz (kHz) = 299,792/Wellenlänge (Meter). Vgl. "Wavelength" (Wellenlänge) und "Channel" (Kanal).

Jamming; Mischmaschen. Die Störung einer Sendung mit der Absicht ihren Empfang unmöglich zu machen. In der Hauptsache kommt "Jamming" heutzutage von der Sowjetunion und ihren osteuropäischen Verbündeten. Es ist gegen Sendungen in den folgenden Sprachen dirigiert: Armenisch, Aserbeidschanisch, Belorussisch, Bulgarisch, Tschechisch, Estonisch, Georgisch, Hebräisch, Lettisch, Litauisch, Polnisch, Russisch, Slowakisch, Tatarisch-Baschkirisch, Turkestanisch, Ukrainisch und Jiddisch. Sowjetischosteuropäisches Mischmaschen bestetht hauptsächlich aus einem Geräusch wie von vielen, lauten Maschinen. Manchmal kann man Identifikationen in dem Morsealphabet hören oder seltener auch verzerrte Programme des Sowjetischen "Mayak" (DS-2) Inlandsdienstes. Ein Mittel zur Minimierung oder zum Abschwächen des Mischmaschens besteht in der Benutzung des Kurzwelleverbreitung. Man tut dies, indem man herausfindet, welche Bände wahrscheinlich guten Empfang für den Teil der Welt geben, den man hören will; aber zur selben Zeit wahrscheinlich nicht guten Empfang von der Sowjetunion oder Osteuropa. Durch Antennen, die auf verschiedene Richtungen eingestellt werden können, kann man zuweilen auch die Beziehung zwischen Signal und "Jamming" unter gewissen Umständen verbessern.

Location; Standort. Der Platz, wo sich die Sendeanlagen, einschliesslich des Senders und der Antennen, befinden. Dieser mag nicht derselbe sein wie derjenige der Studios, wo die Rundfunkprogramme hergestellt werden. Data für die Namen von Standorten wurden in der Hauptsache mit Hilfe der Karten in *The Times Atlas of the World,* Comprehensive Edition, vorbereitet.

Network: Rundfunknetz. Der Dienst oder Service einer Rundfunkorganisation. Ausser solchen offensichtlichen Anwendungen wie 'Weltdienst' kann dieser Ausdruck sich auf Sprachen beziehen, wenn dies nicht durch die graphischen Symbole für Arabisch, Chinesisch, Englisch, Französisch, Deutsch, Japanisch, Portugiesisch, Russisch, und Spanisch angegeben ist. Inlandsdienste sind durch 'DS' (Domestic Service) bezeichnet.

Power; Kraft. Senderleistung in Kilowatt (kW) vor der Amplifikation durch die Antenne. Zur Zeit gebrauchen Kurzwellensender von 0,04 bis 600 kW, aber manchmal werden zwei Sender mit nur kleinen Unterschieden in der Richtung gebraucht.

Relay; Relais. Ausserterritoriale Sendestation, gewöhnlich durch Tonbänder, Satelliten oder Kurzwellendienst versorgt (vgl. 'Feeder').

Shortwave Spectrum; Kurzwellenspektrum. Gemäss der wissenschaftlichen Definition liegt das Kurzwellen zwischen 3 und 30 MHz oder 3,000 und 30,000 kHz. Gewöhnlicher Gebrauch diktiert jedoch, dass es ungefähr zwischen 2 und 30 MHz liegt. In der Praxis kann man Rundfunksendungen fast überall im Kurzwellenspektrum finden. Aber gemäss vor kurzem angenommenen Prinzipien der ITU sind, mit gewissen Begrenzungen, die in den Klammern angegeben sind, die folgenden die nominalen Parameter für Kurzwellen Rundfunkbände.

120 Meterband:
2300–2498 kHz (nur tropische Zone)
90 Meterband:
3200–3400 kHz (nur tropische Zone)
75 Meterband:
3900–3950 kHz (nur Asien und Pazifik)
3950–4000 kHz (mit Ausnahme Amerikas)
60 Meterband:
4750–4995 kHz (nur tropische Zone)
5000–5060 kHz (nur tropische Zone)
49 Meterband:
5950–6200 kHz
41 Meterband:
7100–7300 kHz (mit Ausnahme Amerikas)
31 Meterband:
9500–9900 kHz
25 Meterband:
11650–12050 kHz
21 Meterband:
13600–13800 kHz
19 Meterband:
15100–15600 kHz
16 Meterband:
17550–17900 kHz
13 Meterband:
21450–21850 kHz
11 Meterband:
25670–26100 kHz

UTC. Coordinated Universal Time; Koordinierte Universalzeit; auch Greenwich Mean Time (GMT) oder Zulu (Z) genannt; die 24-stündige internationale Rundfunkreferenz, die sich auf das Observatorium von Greenwich in Grossbritannien basiert. Man kann den Unterschied zw. UTC und örtlicher Zeit bestimmen, indem man internationalen Rundfunksendungen zuhört. Einige Kurzwellenempfänger und Digitaluhren können auf das vierundzwanzigstündige Format gesetzt werden, sodass man nicht umrechnen braucht.

Wavelength; Wellenlänge. Ein veraltender Aúsdruck anstatt Frequenz (vgl. 'Frequency'), um die Lage einer Sendung im Radiospektrum anzugeben. Die Wellenlänge einer Sendung kann durch die folgende Formel errechnet werden: Wellenlänge (Meter) = 299,792/ Frequenz (kHz). Diese Formel kann auch gebraucht werden, um das Meterband einer Sendung zu bestimmen (vgl. 'Shortwave Spectrum').

World Time. Siehe UTC.

Abkürzungen

Alt. Alternate; abwechselnd, alternativ.
AV. A Voz.
BC. Broadcasting; Rundfunksendung-sender, oder-gesellschaft.
BCS, BS. Broadcasting Service; Rundfunkdienst
Cd. Ciudad; City; Stadt.
Cl. Club; Clube; Klub.
Cu. Cult-Culture; Cultura; Kultur.
(D). Winter.
DS. Domestic Service, Inlandsdienst
Ed. Educacão, Educadora.
Em. Emissora, Emisora; Emetteur Strahlung.
ES. External Service, Auslandsdienst.
FR. Federal Republic; Bundesrepublik.
F. Friday; Freitag.
Hz. hertz—A unit of frequency equal to one cycle per second; Eine Frequenzeinhiet, die eine Schwingung pro Sekunde bezeichnet.
Irr. Irregular operation or hours of operation; unregelmässige Sendung.
Is. Island(s); Insel(n).
(J). Sommer.
kHz. Kilohertz, 1,000 Hertz (cf. Frequency); vgl. Frequenz.
N. New; Nueva; Nuevo; Nouvelle; Novo, Nova, Nacional, Nationale; Neu.
Nac. Nacional; National.
Nat. National, Nationale.
PBS. People's Broadcasting Station Volksrundfunkstation.
PR. People's Republic; Volksrepublik.
Pto. Puerto; Pôrto; Hafen.
R. Radio, Radiodiffusion, Radiodifusora, Radiodifusíon, Radiodifusão, Radioemisora, Radiofonikos, Radiostantsiya, Radyo, Radyosu, etc.

Rep. Republic; República; Republik.

RT, RTV. Radiodiffusion Télévision, Radio Television, etc.

S. San, Santa, Santo, São, Saint; in Heiligennamen verschiedener Sprachen und auf solche zurückgehenden Ortsnamen.

Sa. Saturday; Sonnabend, Samstag.

St. Saint; vgl. S.

Sta. Santa, vgl. S.

Sto. Santo, vgl. S.

Su. Sunday; Sonntag

Target. Zielgebiet, spez. die internationalen geographischen Gebiete für die eine Sendung beabsichtigt ist, falls sie ausserhalb des Landes gehört werden soll:

- AF—Africa; Afrika
- AM—Americas; die amerikanischen Kontinente
- ANZ—Australia & New Zealand; Australien u. Neuseeland
- AS—Asia; Asien
- ATL—Atlantic; Atlantik
- CA—Central America, Carribean & Mexico; Mittelamerika, Karibik u. Mexiko
- CAF—Central Africa: Zentralafrika
- EAF—Eastern Africa; Ostafrika
- EAS—Eastern Asia; Ostasien
- EEU—Eastern Europe; Osteuropa
- ENA—Eastern North America; Ostnordamerika
- EU—Europe; Europa
- EUSSR—Eastern USSR; UdSSR (Ost)
- ME—Middle East; Nahost
- NA—North America; Nordamerika
- NAF—Northern Africa; Nordafrika
- PAC—Pacific; Pazifik
- SA—South America; Südamerika
- SAF—Southern Africa; Südliches Afrika
- SAS—Southern Asia; Südasien
- SEA—South East Asia; Südostasien
- USSR—USSR; UdSSR
- WAF—Western Africa; Westafrika
- WEU—Western Europe; Westeuropa
- WNA—Western North America; Westnordamerika
- WUSSR—Western USSR; UdSSR (West)

Th. Thursday; Donnerstag.

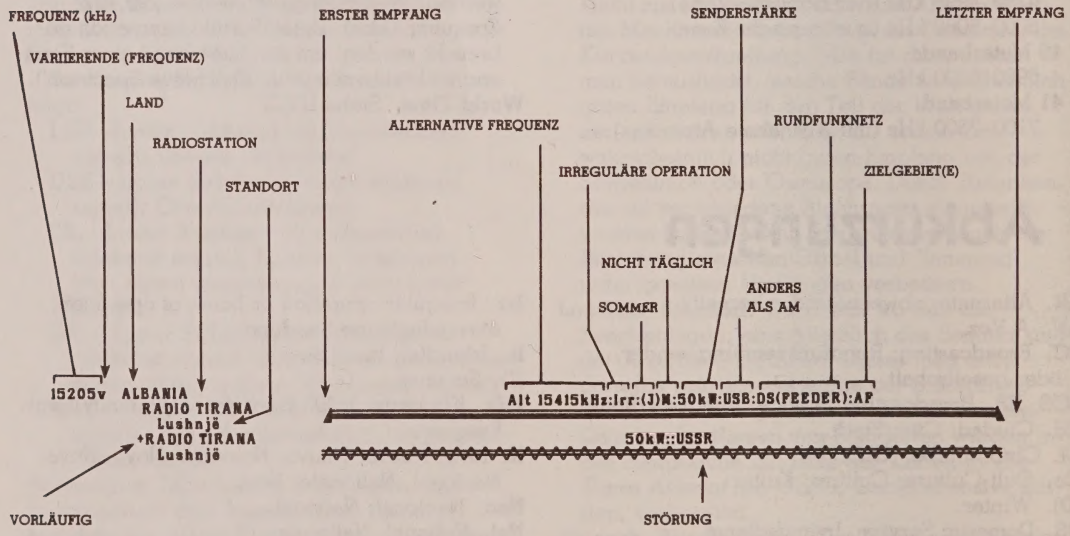
Tu. Tuesday; Dienstag.

v. Variable frequency; variierende Frequenz, d.h. eine, die nicht stabil ist oder sich verändert.

Vo. Voice of. . . Die Stimme von . . .

WS. World Service; Weltdienst.

WORLDSCAN: GEBRAUCHSANWEISUNG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VARIIERENDE (FREQUENZ)
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RADIOSTATION
STANDORT
ERSTER EMPFANG
ALTERNATIVE FREQUENZ
IRREGULÄRE OPERATION
NICHT TÄGLICH
SOMMER
SENDERSTÄRKE
ANDERS ALS AM
RUNDFUNKNETZ
ZIELGEBIET(E)
LETZTER EMPFANG
15205v
ALBANIA
RADIO TIRANA
Lushnjë
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Alt 15415kHz:Irr:(J)M:50kW:USB:DS(FEEDER):AF
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VORLÄUFIG
STÖRUNG

Directory of Advertisers

Advanced Electronic Applications, 21
Alpha Delta Communications, 30, 112
American Radio Relay League, 32, 126
Antenna Supermarket, 108
Atlantic Ham Radio, 42
Barry Electronics Corp., 58
Blaze International Inc., 53
Champs-Elysees, Inc., 40
Com-Rad Industries, 60
Com-West Radio Systems, Ltd., 62
Dressler Active Antennas, 56
Electronic Equipment Bank, 10, 12, 16, 24, 25, 114
Electronics Center, 66
Glenwood Trading Company, 48
Grove Enterprises, Inc., 50
Grundig AG, 2, 3
Hobbytronique, 34
ICOM America, Inc., 7
Imprimé: World Radio Marketplace, 26, 27
Interbooks, 86
Japan Radio Company, Ltd., 65
Kenwood USA Corporation, 400, Inside Back Cover
Klingenfuss Publications, 33
MFJ Enterprises, Ltd., 38, 39
Microlog Corporation, 48
Phase Track Ltd., 43
Philips Consumer Electronics, Inside Front Cover
Radio Canada International, 34
Radio Database International, 94
Radio Infoservices, 118
Radio West, 128
Radio WRNO Worldwide, 116
Radio WWCR, 52
RDI White Papers, 110
Sangean America, Inc., 31
Schau ins Land, 120
Sherwood Engineering Inc., 34
Solar Light Co., 64
Sony Corporation of America, 35
Spectronics, Inc., 14, 15
Stoner Communications, 8
Universal Shortwave Radio, 28, 44, 66
World Press Review, 46
Yaesu USA, 61

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R-2000

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Superior engineering, quality, and performance describe Kenwood's multi-mode communications receiver.

The R-2000 receiver has the most often-needed features for the serious or casual shortwave broadcast listener. Listen in on overseas news, music, and commentary. "Listen up" on the VHF public service and Amateur radio frequencies, as well as aircraft and business band communications with the R-2000 and VC-10 option. The R-2000 has a muting circuit so you can monitor your Amateur radio station's signal quality.

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- HS-4 Headphones
- HS-5 Deluxe headphones
- HS-6 Lightweight headphones
- HS-7 Micro headphones
- DCK-1 DC cable kit for 13.8 VDC operation

Additional information on Kenwood all-band receivers is available from authorized dealers.

Service manuals are available for all receivers and most accessories.
Specifications and prices subject to change without notice or obligation.

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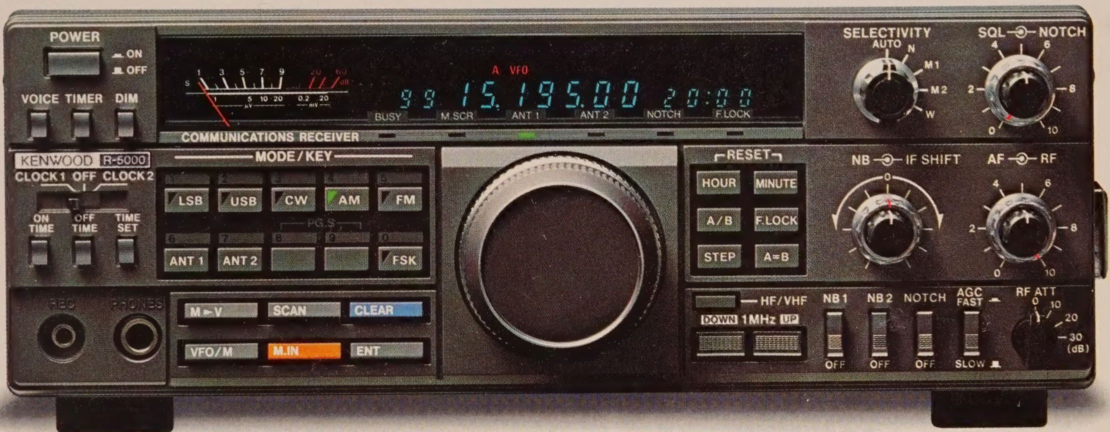
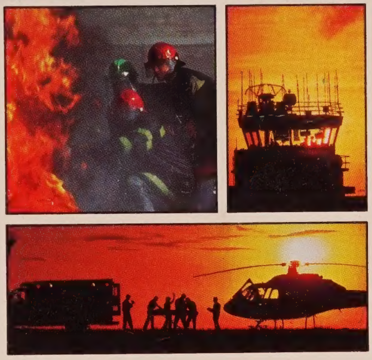


R-5000

High performance receiver

***THE* high performance receiver is here from the leader in communications technology—the Kenwood R-5000. This all-band, all mode receiver has superior interference reduction circuits, and has been designed with the highest performance standards in mind. Listen to foreign music, news, and commentary. Tune in local police, fire, aircraft, weather, and other public service channels with the VC-20 VHF converter. All this excitement and more is yours with a Kenwood R-5000 receiver!**

- **Covers 100 kHz-30 MHz in 30 bands, with additional coverage from 108-174 MHz (with VC-20 converter installed).**
- **Superior dynamic range.** Exclusive Kenwood DynaMix™ system ensures an honest 102 dB dynamic range. (14 MHz, 500 Hz bandwidth, 50 kHz spacing.)



- **100 memory channels.** Store mode, frequency, antenna selection.
- **Voice synthesizer option.**
- **Computer control option.**
- **Extremely stable, dual digital VFOs.** Accurate to ±10 ppm over a wide temperature range.
- **Kenwood's superb interference reduction.** Optional filters further enhance selectivity. Dual noise blankers built-in.
- **Direct keyboard frequency entry.**
- **Versatile programmable scanning, with center-stop tuning.**
- **Choice of either high or low impedance antenna connections.**
- **Kenwood non-volatile operating system.** Lithium battery backs up memories; all functions remain intact even after lithium cell expires.
- **Power supply built-in.** Optional DCK-2 allows DC operation.
- **Selectable AGC, RF attenuator, record and headphone jacks, dual 24-hour clocks with timer, muting terminals.**

Optional Accessories:

• VC-20 VHF converter for 108-174 MHz operation • YK-88A-1 6 kHz AM filter • YK-88S 2.4 kHz SSB filter • YK-88SN 1.8 kHz narrow SSB filter • YK-88C 500 Hz CW filter • YK-88CN 270 Hz narrow filter • DCK-2 DC power cable • HS-5, HS-6, HS-7 headphones • MB-430 mobile bracket • SP-430 external speaker • VS-1 voice synthesizer • IF-232C/IC-10 computer interface.

More information on the R-5000 and R-2000 is available from Authorized Kenwood Dealers.

R-2000 150 kHz-30 MHz in 30 bands • All modes • Digital VFOs tune in 50 Hz, 500 Hz, or 5 kHz steps • 10 memory channels • Programmable scanning • Dual 24-hour digital clocks, with timer • 3 built-in IF filters (CW filter optional) • All mode squelch, noise blanker, RF attenuator, AGC switch, S meter • 100/120/220/240 VAC operation • Record, phone jacks • Muting terminals • VC-10 optional VHF converter (118-174 MHz)

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